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MASTER'S THESIS:  
MOUNTAIN ULTRATRAIL RUNNERS-MOTIVES, INTENTIONS, AND OUTCOMES: A MIXED-DESIGN

by  
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## Declaration

I hereby declare that this work is entirely original and of my own work. Any use of other work has been cited accordingly.

I understand and accept that an electronic and hard copy must reside in the University Library.

Christopher Henry Alan Praetzel

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### Abstract

In the past several years the sport of ultrarunning has expanded significantly. However, little research has been done to explore this phenomenon. Using a mixed-method design, the present study was conducted to examine the motives, intentions and outcomes. Utilizing Self-Determination Theory (Deci & Ryan, 1985) and Theory of Planned Behavior (Ajzen, 1991) frameworks, a model was proposed between need support, motivation type and outcomes. Our hypotheses were that need support would be connected to more autonomous motivation and positive psychological outcomes including perceived behavioral control and intention to participate in an ultrarunning race taking place few months later. In turn, intention and perceived behavioral control would be positive predictors of participation in this future ultrarunning race. Eight-five ultrarunners planning to compete in the Rodopi 100 mile race in Greece completed the questionnaire (mean 42.76 years old S.D. 8.7) and eight semi-structured interviews during the race. Measures included a theory of planned behavior elements following Ajzen 2002's recommendations, need support, an organismic integration theory questionnaire, and outcomes (worry, enjoyment, life satisfaction, and subjective vitality). Results from logistic regression revealed that while both intention and perceived behavioral control were positive predictors of race participation, when both predictors were into the equation only perceived behavioral control contributed significantly to the prediction. Structural equation models revealed significant results for the connection among needs support autonomous motivation and positive psychological outcomes. The written qualitative reasons revealed that individuals were more autonomously motivated to participate in the race. Common reasons were nature, the mountain, and the community. These reasons can be promoted by ultrarunning race organizers to attract participants. Finally, as perceived behavioral control emerged as a major predictor of participation in the race, interventions to increase perceived behavioral control could be an effective intervention method.

## Table of Contents

<b>Introduction.....</b>	<b>1</b>
Self-Determination Theory.....	2
Theory of Planned Behavior .....	5
Linking the theories .....	4
Purpose.....	6
Hypotheses .....	7
<b>Methods .....</b>	<b>9</b>
Procedure .....	9
Measures .....	10
Quantitative .....	10
Qualitative.....	12
Semi-structured interviews.....	12
<b>Data Analysis .....</b>	<b>14</b>
<b>Results</b> Quantitative-Descriptives .....	16
Confirmatory Factor Analysis.....	18
Logistic Regression .....	23
Structural Equation Modelling .....	24
Qualitative-Three Reasons/Most Important .....	30
Interviews.....	34
<b>Discussion .....</b>	<b>40</b>
Limitations .....	43
Conclusions .....	44
<b>References .....</b>	<b>46</b>
<b>Appendix A</b> Informed Consent Form .....	<b>55</b>
<b>Appendix B</b> Questionnaire .....	<b>57</b>
<b>Appendix C</b> Interview Guide .....	<b>63</b>
<b>Appendix D</b> Three Reasons Categories .....	<b>66</b>
<b>Appendix E</b> Most Important Reasons Categories .....	<b>71</b>
<b>Appendix F</b> Interview Questions answered by author .....	<b>74</b>
<b>Appendix G</b> Pilot Interview .....	<b>79</b>

Interview Text .....	86
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## Introduction

The sport of ultrarunning is one that has grown tremendously in the last several years. An ultramarathon race is any race over the standard 26.2 miles (42 kilometers). These can be races of either a distance such as 100 miles, or a time, such as 24 hours to complete as much distance as possible. The numbers of races and participants are growing significantly, and there are races on all seven continents. In 1909 there was only one 100 mile race in America, while in 2012 there were 96 (Hoffman & Krishnan, 2013). As seen in Table 1, ultramarathons are truly a global phenomenon.

Table 1.

### *Global Ultraraces*

Name	Location	Distance
<b>Badwater Ultramathon</b>	Mojave Desert (USA)	217km (135 mi)
<b>Marathon des Sables</b>	Sahara Desert (Morocco)	251km (156 mi)
<b>Jungle Marathon</b>	Manaous, Amazonia Brazil	200km (124mi)
<b>Ultra-trail du Mt. Blanc (UTMB)</b>	France, Italy, Switzerland (Alps)	166km (103 mi)
<b>Antarctic Ice Marathon and 100k</b>	Antarctica	100 kilometers (62 mi) and 42km
<b>Everest Trail Race</b>	Himalayas, Nepal	160km (100 miles)

Note: Race information retrieved from: Badwater Ultramarathon, Marathon des Sables, Jungle Marathon, Ultra-trail du MT. Blanc, Antarctic Ice Marathon, and Everest Trail Race. See references.

Ultrarunners are part of a unique group and differ from the general population in a number of ways. Research by Hoffman and Fogard (2012) examined Western States Endurance Run participants, a 100 mile race through the Sierra Nevada Mountains in the US. They found in participants that were at least 25 years old, 43.1% hold at least bachelor's degree and 23% hold at least a master's degree which is much higher than the general matched (25 years or older) US population who during this same time

71% did not have a bachelor's degree (US Census Bureau, 2008.) TransEurope Footrace participants were found to have a higher pain tolerance than healthy match controls (age, sex, and ethnicity) in a cold pressor test (Freund et al., 2013). The background of the top finishers is also unique. The top performers are not East Africans who dominate at distances such as the marathon. Instead, at 100km races Japanese runners were found to be the best (Cejka et al., 2014), US-American (Gerosa, Rust, Rosemann, & Knechtle, 2014) in 161km races, and Europeans in multistage-races (Shoak, Knechtle, Rüst, Lepers, & Rosemann, 2013).

Unlike major marathons like the Boston Marathon which in 2015 offered cash prizes of \$150,000 (USD) to the top male and female, and \$75,000 to the second place finishers (Boston Athletic Association, 2015), there are very little monetary rewards in ultrarunning. The Badwater Ultramarathon considered by many to be the toughest race in the world (National Geographic, 2009) offers no cash prize (Badwater, 2015). Ultramarathons also have a very high percentage of drop-out, with 40 percent of racers not finishing, either due to injury, voluntarily, or not meeting cut-off times. Injury rates are also very high with over 50 percent reporting a significant injury in training (Stevenson, 2011).

During ultraraces individuals experience physiological changes including losses in muscle mass, body fat, and increase in percent body water (Knechtle, 2008). Within the challenge of a race individuals have been found to using coping strategies including making small goals, engaging in a mental/physical battle, monitoring pace, nutrition and hydration, and social support (Holt, Lee, Kim, & Klein, 2014). Preliminary findings of characteristics and race experience indicate that those higher in trait emotional intelligence have more positive emotions during races (Lane & Wilson, 2011).

With these distinct characteristics coupled with the large increase in participation in recent years, it is important to find out what drives this behavior. In particular what aspects keep them to train long miles and days, and what the experience provides for them. In doing so we hope to provide



information for applied psychologists who work with this population, and race organizers to inform on processes that can improve the experience for their runners. Ultimately, through these two different groups we hope to serve the mountain ultratrail runner him and herself.

### **Self-Determination Theory**

To further explore this area Self-Determination Theory (Deci & Ryan, 1985) can serve as an important assessor of motivation. Within the theory individuals have three innate needs of competence (referring to a sense of accomplishment) relatedness (connection to others) and autonomy (a sense of free will and direction.) If an individual can satisfy them he or she is more likely to persist in that activity (Calvo, Cervelló, Jiménez, Iglesias, & Murcia 2010). In addition, there is a connection between need satisfaction and well-being, such as vitality, and positive affect (Sheldon, Ryan, & Reis, 1996).

A sub-theory of Self-Determination Theory, the Organismic Integrated Model of motivation is a continuum of motivation. The model spectrum moves from amotivation, a lack of motivation to intrinsic motivation, activity completed solely for the interest in itself. Moving from amotivation, the behavior moves from extrinsic to more self-determined motivations. Within extrinsic motivation the least self-determined is external regulation, where rewards or other external sources control behavior. Following, is introjected regulation where behavior is done to avoid shame or guilt. These two are forms of controlled forms of motivation, as the individual feels the control is out of his or her hands and pressure to act in a certain way. Moving toward lesser forms of extrinsic motivation is identified, where the individual is cognizant of the value of the activity. Finally, at the end of the continuum is intrinsic motivation, where the activity is done solely for the pleasure and enjoyment of it (Deci & Ryan 2000).

Intrinsic motivation leads to many positive behavioral outcomes including persistence (Frederick, 1991) and increases in performance (Grant, 2000). The environment can also change the

motivational orientation. Deci, Koestner, and Ryan (1999) meta-analysis found engagement-contingent, completion-contingent, and performance-contingent rewards significantly thwart intrinsic motivation.

Systematic reviews have provided ample evidence of the effectiveness of intrinsic motivation building interventions on individuals. Within the mental health field practitioner support of individuals' basic needs, and patient's need satisfaction is associated with positive health outcomes (Ng, et al. 2012). In the exercise and physical activity context the more autonomous forms of motivation (intrinsic, integrated) consistently have a positive relation with exercise behavior (Teixeira et al., 2012) and a positive effect on sport participation (Adie, Duda, & Ntoumanis, 2008) and well-being (De Meester, Aelterman, Cardon, De Bourdeauhuji, & Haerens, 2014). On the other hand, controlled forms of motivation (introjected, external) have a negative effect on sport continuation (Sarrazin et al., 2002) and well-being (Gagne, 2003). In particular high self-determined regulation (identified, intrinsic) has been found to have a direct effect on habit strength independently of past behavior (Gardner & Lally 2013). Between genders there are no significant differences in regulations (Guerin, Bales, Sweet, & Fortier, 2012).

Within extreme endurance sports satisfaction of needs was examined with its relation to flow state. Ninety-three German-speaking long-distance runners completed questionnaires of their flow state, achievement motivation, outcomes, and exercise addiction. Those who were more achievement-oriented benefited better by the satisfaction of competence in reaching flow, while those who were more affiliation-based had higher positive affect as well as lower exercise addiction indicators than athletes with lower affiliation-based motives (Schüler, Wegner, & Knechtle, 2014). This means that those who are more achievement-minded will have a better experience by satisfying their need for competence, while affiliation individuals enjoy the experience more holistically, and show less signs of exercise addiction.

However, in ultrarunning motivation has still been largely unexplored (Knechtle, 2012). In particular, no research examined whether this population would follow similar patterns of satisfaction of needs, or differ in significant ways. Ultrarunning by design involves much time alone by the self away from others, so would relatedness still be desired, and if so how? Women ultrarunners have been found to be task-oriented, internally motivated, and health conscious (Krouse, Ransdell, Lucas, & Pritchard, 2011). Compared to other athletes, ultrarunners are more confident and lower on win orientation (Acevedo, Dzewaltowski, Gill, & Noble, 1992).

Doppelmayr and Molekenthin (2004) explored adventure ultrarunners (defined by Marathon des Sables participants, a multiday desert race), ultrarunners and marathoners. The runners provided verbal reasons for participating which were then factored into the 13 dimensions of the Motivation of Marathoners Scale (Masters, Ogles, & Jolten, 1993). The categories included competition, life meaning, nature, personal goal achievement, among others. The results showed that between adventure ultramarathoners and ultramarathoners there were not significant differences, but there were from adventure ultramarathoners to marathoners. In particular the importance of competition reduced, life meaning increased, as well as the importance of nature. However, a major weakness is the assumption that the motivations of ultrarunners can be mapped on a scale for marathoners. Although marathons also represent a challenge of distance, ultrarunners differ from marathoners in a number of ways. Other similar research found that marathoners are more motivated by health and recognition while ultrarunners are more motivated by psychological health, social weight concern, and motives concerning the meaning of life (Stoll, Würth, & Ogles, 2000).

A Phenomenological study was completed by Simpson et al. (2012) examining the collective experience of ultrarunners. Five themes emerged: preparation and strategy, management, discovery, personal achievement, and community. Preparation and strategy refers to training including finding out how best to refuel on the run, deal with differing terrains and other areas. Management

refers to the actual race including pain and mental skills. Personal achievement is the desired sense of accomplishment. Discovery includes pioneering-exploring previously unknown parts of the self, spiritualism, and personal achievement. Community involves the view of the self to other participants viewing them as similar minded, and desiring to train with them (Simpson et al., 2012).

### **Theory of Planned Behavior**

The Theory of Planned Behavior is a model to examine behavior (Ajzen, 1985) and provides foci for changing of behavior. The model states that subjective norms, attitudes towards the behavior and perceived behavior control influence intention which in turn influences behavior. Subjective norm refers to social pressure for or against the behavior. Attitude toward the behavior involves whether the behavior is viewed favorably or unfavorably. Perceived behavioral control is the ability and difficulty of the behavior in question. Additionally, perceived behavior control directly influences behavior. An intervention would aim to cause change within one of these realms to adopt a new behavior.

Perceived behavioral control is divided into two different dimensions. Capability refers to how able an individual feels like they can complete a behavior, for example running a marathon. Whereas, the other controllability refers to their ability to exert on a behavior, that their ability to complete it is or is not up to them. (Ajzen, 2002). An example is their belief in their ability to walk 30 minutes a day for one month.

Using the theory's framework it has been found to be effective in predicting physical activity (e.g., Theodorakis, 1994) and diet behaviors (e.g., McEachan et. al., 2011). Specifically with running as leisure, the theory of planned behavior elements were effective in predicting behavior in college students (Ajzen & Driver, 1991).

### **Linking Self-determination theory and theory of planned behavior**

Attempts have been made to link self-determination theory and theory of

planned behavior. It has been hypothesized that the satisfaction of needs will lead to more positive attitudes toward a behavior and also a higher perceived behavioral control. In adolescents autonomous motivations and intentions to participate in leisure-time Physical Activity (PA) were mediated by attitude and perceived behavioral control (Hagger, Chatzisarantis, & Biddle, 2002). Other findings indicate correlations of SDT items and TPB in exercise and dieting behaviors (Hagger, Chatzisarantis, & Harris, 2006). Within the sporting environment satisfaction of needs correlated with TPB elements, and sport continuation one year later (Gucciardi & Jackson, 2015).

In the context of ultrarunning this linking of the theories has not been examined. It is important to find out this explanation of behavior, both to map the theory and see if it differs from this other research, and if so how? The duration of ultrarunning events and also the smaller field provide two elements that could cause differential effects on this population, compared to other areas.

### **Purpose**

The purpose of this study is to examine the relatively unexplored area of mountain ultratrail running. With the rapid growth of ultrarunning we seek to examine what it is that attracts these runners to the sport? Furthermore, what influences make the difference between just having an interest in the sport, and participating in races. Will the sport follow similar patterns of behavior and satisfaction of needs. In particular, we seek to find out what drives their participation and motivation using self-determination frameworks and also theory of planned behavior to see if there is any significant correlation between the model factors and participation in mountain ultratrail running.

Previous research has found connections between satisfaction of basic needs and well-being (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Similarly, longitudinal study on elite youth soccer players found that satisfaction of basic needs over a season positively predicted

improvements in well-being (Adie, Duda, & Ntoumanis, 2012). Hence, this study also examined the effects of psychological needs satisfaction and autonomous motivation on well-being.

### **Hypotheses**

Using self-determination theory and theory of planned behavior frameworks which have been found to relate well to one another (Gucciardi & Jackson, 2015) we sought to examine the following pathways within the quantitative analyses similar to those of (Hagger, Chatzisarantis, & Biddle, 2002). The qualitative analysis will provide context to these hypotheses.

1. If basic needs are satisfied individuals will be more likely to be intrinsically motivated. This in turn will correlate with intention, perceived behavior control, subjective norms, and attitude, and positive life outcomes.
2. If basic needs are not satisfied individuals will be more likely to have higher degrees of extrinsic motivation. This in turn will cause individuals to have lower intentions of participation, subjective norms, and attitude, and more negative life outcomes.

## Methods

### Procedure-Participants

The sample of the present research consisted of ultra mountain runners who were interested in running the Rodopi Ultratrail (ROUT) 100 mile Advendurun race in Northern Greece. Prior to beginning the research, approval was granted by the researcher's university's ethics committee. Participants were informed they could drop out at any time, ensured of confidentiality, and that the research would be used solely for research purposes.

Before the ROUT race: Initially (April 24), twenty six participants competing in the Rodopi Challenge 50 mile race, another race given by the organization, completed print versions of the questionnaire. The questionnaire was conducted in Greek. Front and back translation of items was conducted prior to distributing the questionnaire by a native Greek speaker. Items were translated using google translate by the first author and then checked and checked and corrected by the native Greek speaker. These then were translated back to English for comparison. Secondly (July), another 85 participants were provided with the questionnaire online using Survey Monkey by the contact list of the ROUT organization. Participants were contacted by email twice. In addition, the link was shared on the facebook page of the ROUT race ([www.facebook.com/rout100miles](http://www.facebook.com/rout100miles)), and on the website of the organization ([www.rout.gr](http://www.rout.gr)).

Participation in the race was assessed by date of birth and last four digits of phone number to identify who from the data participated, finished, or did not participate. Fifty-nine total people completed the online questionnaire. Respondents' nationalities were Greek and one American. Participant mean age was 42.76 (S.D. 8.5).

During July, the first author (previously an ultrarunner) answered the interview questions for himself to identify any holes within the interview structure. Following this, a pilot

interview was conducted with an 100 mile ultrarunner. The runner was an American who runs the same distance as the ROUT race but will not run it. The interview ran about 25 minutes, and allowed for refinement of the procedure and interview.

After the ROUT race: Finally (October 17-18), 8 participants accepted our invitation for semi-structured interviews were conducted during the weekend of the Rodopi Ultratrail 100 Mile race following their finish or drop-out of the race. The interviewees were selected based on convenience (those who were near the finish area) and were asked to take a short interview if they were interested and available. Interviews were conducted in English to triangulate and complement the questionnaires. Seven athletes finished, and one did not finish. Athletes were informed at the time of the electronic questionnaires (second questionnaire) about the subsequent interviews, and were found the weekend of the race. Interviews were conducted at the finish area of the race either outside or inside at a small eating area at the convenience of the interviewee. Interview range was from from 5 minutes to 25 minutes.

## **Measures**

Demographic information obtained included their date of birth, place of residence past running and sport experience, past mountain ultratrail running experience, and expected finish percentage.

## **Quantitative**

Self-Determination Theory needs support (Autonomy, Competence, Relatedness) was assessed using the prompt ‘During the last 3-4 weeks of my running training and responded to a 5 point likert-scale from strongly disagree to strongly agree. Questions assessing autonomy included “I decided how I wanted to practice”, “I had a say on what type of training I want to do”, “It was my choice to run” “I felt the freedom to do some things my own way”, and “I had some choice in



what I did". Assessing competence included "I felt I was quite good at ultrarunning", "I was satisfied with what I did", "I was quite satisfied with my training times," "I felt quite competent," "I felt I performed very well," and "I think I did quite well." Relatedness support questions included "I felt people supported me," "I felt people understood me", I felt people listened to my opinion", and "I felt people valued me,". These items were adapted from Quested et al. (2013) and adjusted to the context of ultrarunning.

*Organismic Integration Model-* Following the prompt please check the appropriate number for how well these statements express your reasons for participating, a 25-item questionnaire was used with a five point likert scale of (completely disagree, disagree, neutral, agree, and completely agree). The original instrument was developed by Losdale, Hodge & Rose (2008) and its items were adjusted for ultrarunning. Based on recommendations of Viladrich et al. (2013) the "integration" subscale was excluded. Instead, items to create a "win" subscale were added. Questions included "To enjoy," (intrinsic); Because the benefits of the race are important to me (eg to get in good physical condition, to meet new runners)", (identified); Because I would feel guilty if I was not running," (introjected); Because some people are pushing me to," (external regulation); "To win the fight," (win category of external regulation); I wonder why I should do this," (amotivation); "I like it," (intrinsic); "Why I appreciate very much the benefits of the race eg., learn about new things, getting healthy, to make friends, etc.)" (identified). "Because I will be ashamed if not running," (introjected); "In response to the people who want me to be in the race," (external regulation); "For the medal/cup of victory," (Win); "But I wonder why to," (amotivation); "Because it is fun," (intrinsic); "It teaches me self-discipline," (identified); "Because I feel that I must succeed in ever endeavor for myself to continue to run, and don't give up," (introjected); "I feel pressure from other people to run," (external); "Because

I want to earn honors (eg, athlete of the race),” (win); “The reasons to run are not clear to me,” (amotivation); “Because I find it fascinating,” (intrinsic); “It is a good way to learn about things that are useful in my life,” (identified); “I would feel unimportant if I didn’t run,” (introjected); “Because if I do not some people will not be happy with me,” (external); “But I wonder what is the reason to continue,” (amotivation); “To gain a leading position,” (win); “I would be in a difficult position if I did not run,” (introjected).

*Theory of Planned Behavior* A measure of Theory of Planned Behavior elements was used based on theory recommendations (Ajzen, 2002) assessing intentions, perceived behavioral control, attitudes and subjective norms. The scale was a 7-point likert scale between two adjectives. Each of the questions were framed specifically for the ROUT 100 mile race on 17-18 of October 2014. For the intention items questions were “I intend to run (spectrum unlikely to likely) with items extremely, enough, little, so-so, little, enough, extremely between the two, and “I am determined to run” (no to yes) with absolutely, enough, somewhat so-so, somewhat, enough, and absolutely. For perceived Behavioral Control items were “For me to run in (difficult to easy) with very, enough, somewhat, so so, little, enough, and very, “You can run (likely to unlikely) very, enough, little, so so, little, enough, very, and “I’m pretty sure I will run in (wrong to correct) with very, enough, little, so-so, little, enough and very. For attitudes items were a pair of adjectives following the prompt “For me to run in ROUT 100 mile race on 17-18 October 2014 is (answer to the following pair of adjectives). Each was on a 7point likert scale indicating the degree to which it agreed to one or the other (from very enough, little, so-so and little, enough, and very to the other. Pairs for attitude were evil-good, repelled-attracted, dissatisfied-pleasant, useless-useful, boring-interesting, and insignificant-significant. For subjective norms the prompt was “For the Rout 100 mile race 17-18 October 2014 most people who are important for me and pairs

of adjectives (discourage-encourage, thwart-facilitate, hurt-help, change-support, not-praise-praise, bad opinion-good opinion)

*Outcomes*-The next items were used as outcomes in the models examined.

Well-being was assessed with the Positive attitudes to life scale which comes from the Berne Questionnaire on Adolescent Subjective Well-being (Grob et al, 1991; Grob, Little, Wanner, Wearing, & EURONET, 1996). This is an eight-item questionnaire assessing how they are satisfied with their everyday life on a 1-5 point likert scale following the prompt “In general in my life.” Items include “My future looks good;” “I enjoy life more than most people;” “I am happy with the way my life plans are being carried out;” “Whatever happens I can see the bright side;” and “I find life amusing;”.

Enjoyment was assessed with the four items of (McAuley et al., 1989) scale, which were adjusted for ultrarunning. This scale has shown acceptable validity across several countries including Greece (e.g., Quested et al., 2013). Responses were given in 5-point Liker-type scale (1= Strongly Disagree, 5 = Strongly Agree).

### Qualitative

Open questions: Within this mixed-method approach, the qualitative data were used to help complement and provide context to the quantitative data and hypotheses (Greene, Caracelli, & Graham 1989) participants provided answers of their motives to the question “For me the three reasons for participating in mountain ultratrail running are?” and “The most important reason is?”

Interview guide: Additionally to complement the quantitative data semi-structured interviews were run from a phenomenological framework to provide the essence of the mountain

ultrarunning experience (Moustakas, 1994), particularly the motives, experiences, and outcomes. Question focus areas included TPB elements, exploration of motives, outcomes from participating, and any other themes that emerged. Appendix C contains the interview questions.

## **Data Analysis**

### **Quantitative analyses**

Quantitative data was analyzed with SPSS version 18.0 and AMOS v.18. To examine the validity of each instrument Confirmatory Factor Analysis was conducted. The Internal consistency-reliability of the measures was examined using Cronbachs'  $\alpha$ . Items that lowered internal consistency were removed.

Pathway analyses were conducted using Amos v. 18 to examine the relationship between Needs support, motivation (Autonomous or controlling) Theory of Planned Behavior, outcomes (Enjoyment, life satisfaction) and actual participation in the race. In order to test hypotheses eight SEM were conducted. Model 1 examined need support-autonomous motivation-enjoyment. Model 2 need support-autonomous motivation-intention. Model 3 examined need support-autonomous motivation-life satisfaction. Model 4 examined need support-autonomous motivation-perceived behavioral control. Model 5 examined needs support-perceived behavioral control-enjoyment. Model 6 examined needs support-controlled motivation-enjoyment. Model 7 examined needs support-controlled motivation-intention. Model 8 examined needs support-controlled motivation-perceived behavioral control.

### **Qualitative analyses**

Following translation qualitative answers were translated by the first author using electronic translation. The Greek text and the English translations were then examined and corrected to fix

any content and translation problems. The answers to the most important and three most important reasons were categorized by the first author according to Satisfaction of Basic Needs and the Organismic Integration Model and the frequency of type. Any reasons that did not fit within the dimensions of the theory were placed into a separate category. In addition the reasons were categorized according to the reasons developed from the initial responses in the print questionnaire.

Interviews were prepared and organized, read through thoroughly for a general impression, and comprehensively coded, based on Creswell (2003) recommendations. Data was analyzed inductively to see how the data fit within the model of Theory of Planned Behavior and Self-Determination Theory. The procedure was a three step approach of a) generating a code, b) reviewing and revising the code in the based on the raw information, and c) determining the reliability of the coders and therefore the code (Boyatzis, 1998.)

## Results

### Quantitative

#### Reliability Analysis

Reliability Analysis was conducted on the scales to calculate the internal consistency of scales. Results revealed a good fit for all Organismic Integration Model items Intrinsic  $\alpha=.78$ , Identified  $.68$ , Introjected item 3 “I would be embarrassed to quit” was removed moving the alpha from  $.64$  to  $.70$  Extrinsic  $\alpha=.80$  and the categorical Win  $\alpha=.757$ . Needs support Cronbach’s alpha was  $.67$  for autonomy (after removal of autonomy 1 “I decided how I wanted to practice”, Competence  $\alpha=.83$ , and support  $\alpha=.70$  Theory of Planned Behavior Elements revealed for intention  $.96$ , attitudes  $\alpha=.88$   $pbc=.92$  after removal of item 1 “For me to run in the ROUT) miles on 17-18 October is,” , subjective norms  $\alpha=.94$  For the Diener Satisfaction With Life Scale a good Cronbach’s Alpha score was found of  $\alpha=.89$ . The Penn State Worry Questionnaire had a score of  $.852$ . The Subjective Vitality Scale reported a Cronbach’s Alpha of  $.91$ . The Berne Subjective Questionnaire for Adolescent’s Wellbeing (Grob et. al. 1991) reported a Cronbach’s alpha of  $\alpha=.89$ .

### Descriptives

Descriptive statistics were found using SPSS vol 18. The results are found in the table below.

Autonomy and Intrinsic Motivation had the highest means on SDT items

Table 1. Self-Determination Items

Variable name	Variable code	Mean	Standard Deviation (S.D.)
Autonomous need support	aut(2,3,4,5)/4	4.0133	.44245
Competence need support	com (1-6)/6	3.6216	.50665
Relatedness need support	sup(1-4)/4	3.6000	.48976
Intrinsic regulation	intr(1-4)/4	4.3467	.48958
Identified regulation	ident(1-4)/4	4.2467	.57023
Introjected regulation	intrj (1,2,4,5)/4	1.8586	.72150
External regulation	ex (1,3,4)/3	1.3070	.51284
Amotivation	am(1,2,3,4)/4	1.7233	.67480

Table 2-TPB items

	Variable	Mean	S.D.
Intention	int (1+2)/2	5.6845	1.97542
Perceived Behavioral Control	pbc (2,3)/2	3.5974	1.36512
Attitudes	att (all)	6.3146	.94019
Subjective Norms	norm (all)	5.4671	1.30395

Table 3. Outcomes

Variable	Variable code	Mean	S.D.
Enjoyment	enj (enj1-4)/4	4.1300	.53011
Life satisfaction	glifsat (1-8)/8	3.8667	.53915

## **Confirmatory Factor Analysis models**

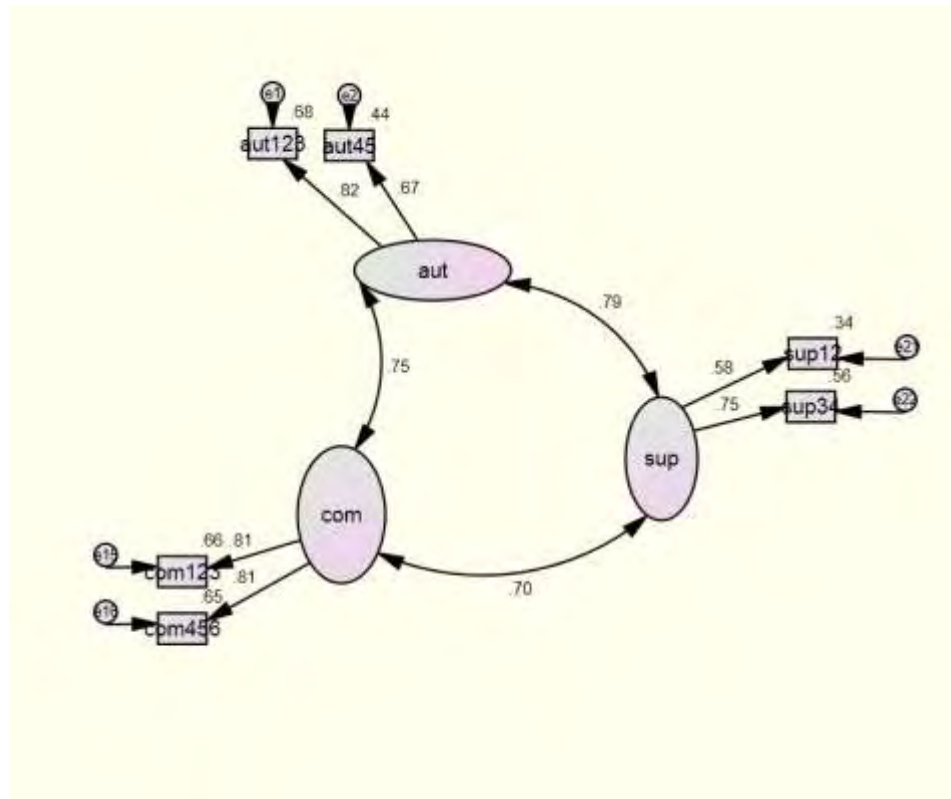
### **Need Support**

Confirmatory Factor Analysis was conducted on the need support questionnaire. Parcelling techniques were used in the model to help reduce the number of parameters to define the construct (e.g., autonomy). This is recommended if sample sizes are smaller (Little, Cunningham, & Shahar, 2002). The technique involves averaging the items from the questionnaire in order to reduce the number of variables forming the latent construct. Autonomy was grouped for items 1-2-3 and 4-5, support 1-2, 3-4, and competence 1-2-3, 4-5-6.

Model testing utilized a  $p > .05$  probability cut off and  $\chi^2/df$  test (Wheaton, Muthen, Alwin, & Summers, 1977) with a cut off of 2.0 (Tabachnick & Fidell, 2007). Due to weaknesses of the chi-square test additional fit indices were used including the TLI, Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). Goodness of fit indexes recommendations from Hu and Bentler (1999) are that the TLI and CFI should be close to, or ideally above .95. For RMSEA the value of  $< .08$  indicates a good fit, and a mediocre fit .08-1.0 (MacCallum, Brown, Sugawara, 1996.)

Results revealed  $\chi^2(6)=9.14$ ,  $p=.17$ ,  $df=6$ ,  $\chi^2/df=1.5$  TLI=.943, CFI=0.977, RMSEA=0.085, indicating an acceptable factor structure.





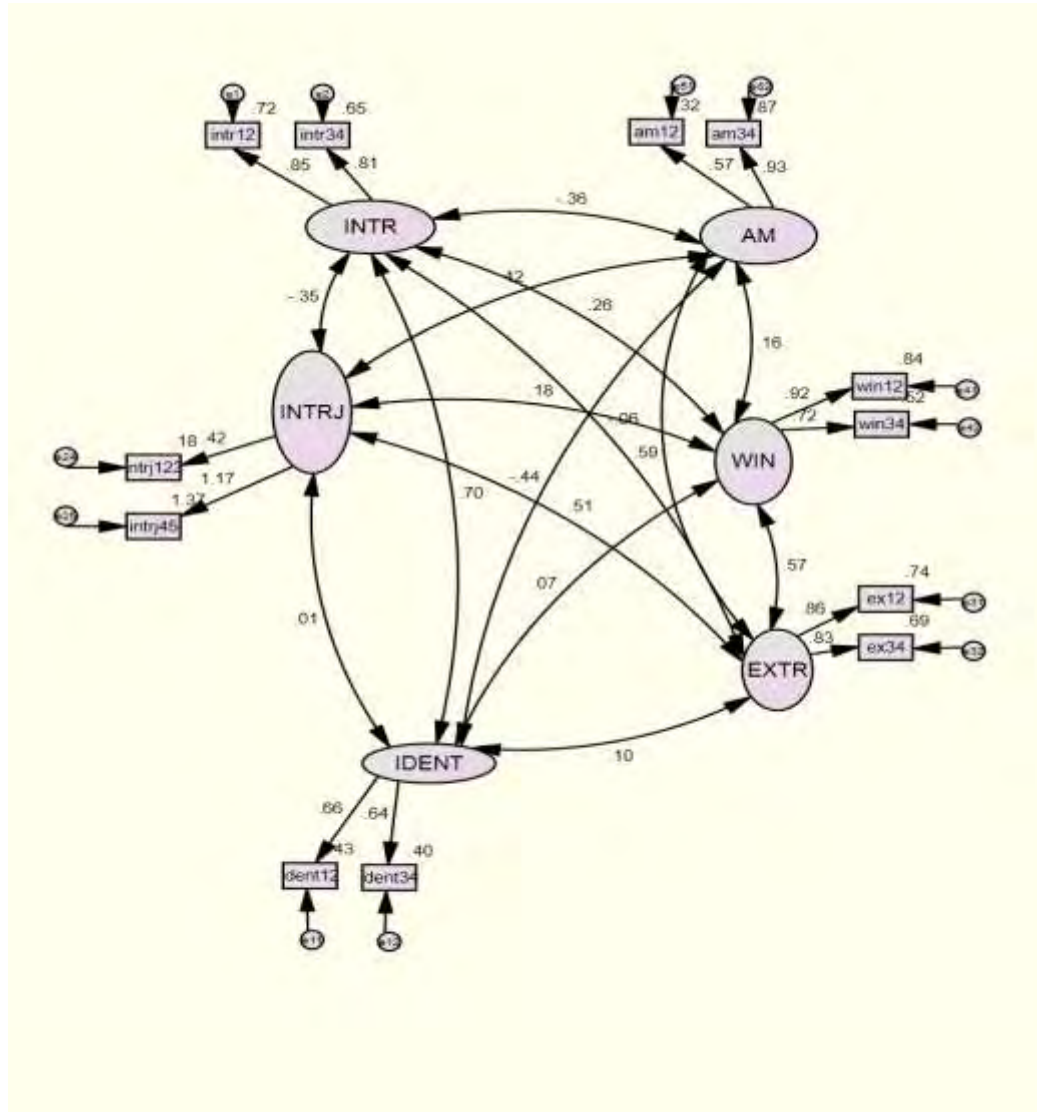
**Fig. 1: SDT Need support**

### Organismic Integration Model

Confirmatory Factor Analysis was conducted on the Organismic Integration Model questionnaire responses. Sample size was 73. Manifest variables were grouped into twos with the exception of introjected, (1-2-3 and 4-5). Extrinsic regulation was separated into two latent variables, extrinsic and win. Observed variables were parceled to ensure that each latent variable had two indicators. Results revealed  $\chi^2=59.17$ ,  $df=6$ ,  $p=0.020$ ,  $TLI=0.893$ ,  $CFI=0.937$ ,  $RMSEA=0.085$ , indicating an acceptable factor structure.

Factor correlations were intrinsic to amotivation-.36, intrinsic to win .36, intrinsic to extrinsic -.06, intrinsic to identified .70, intrinsic to introjected -.35, introjected to identified .01, introjected to extrinsic .51, introjected to win .18, introjected to amotivation .42, identified to extrinsic .10, identified to win .07, identified to amotivation -.44, extrinsic to win .57, and win to

amotivation .16. These findings are in line with SDT supporting the internal validity of the model.



**Fig. 2: Organismic Integration Model**

## Correlations

Relationships were tested between the variables (Pearson's Correlation). Results revealed significant effect correlations for enjoyment with Grob Life Satisfaction  $r=.39$  ( $p<.01$ ), autonomous motivation (intrinsic  $r=.51$  ( $p<.01$ ), enjoyment and autonomy  $r=.48$  ( $p<.01$ ), large effect size between enjoyment and competence  $r=.62$  ( $p<.01$ ), enjoyment and relatedness (support  $r=.41$  ( $P<.01$ ), and medium for Theory of Planned Behavior element of attitudes  $r=.35$  ( $P<.01$ ). Global Life Satisfaction correlations were revealed between it and autonomous motivation medium  $r=.485$  ( $p<.01$ ), autonomy (medium  $.49$   $p<.01$ ), competence (medium  $r=.43$   $p<.01$ ), support (medium  $r=.435$   $p<.01$ ). Autonomous motivation was correlated with autonomy (medium  $r=.41$   $p<.01$ ), competence medium  $r=.49$   $p<.01$ ), intention small  $.272$  ( $p<.05$ ), perceived behavioral control (medium  $.33$   $p<.01$ ) attitudes large  $r=.55$  ( $p<.01$ ), and subjective norms large  $r=.51$ ,  $p<.01$ . The variable controlling motivations did not have any significant correlations. Autonomy had a close to large correlation with competence ( $r=.60$   $p<.01$ ), medium with support ( $r=.51$   $p<.01$ ), attitudes small  $r=.247$  ( $p<.05$ ). Competence was found to be correlated with support (medium  $r=.480$   $p<.01$ ), and attitudes (medium  $r=.498$   $p<.01$ ). Support was found to be correlated with all items of the Theory of Planned behavior except intentions (PBC small size  $=.24$ , ( $p<.05$ ), attitudes medium size  $r=.409$   $p<.01$ , norms small size ( $r=.26$   $p<.05$ ). Intentions was found to be significantly correlated with PBC ( high,  $r=.90$   $p<.01$ ) and attitudes (Medium,  $r=.43$   $P<.01$ ), norms (medium  $r=.43$   $p<.01$ ), and participation (medium  $r=.49$   $p<.01$ ). Perceived behavioral control was correlated with attitudes (medium size  $r=.41$  ( $p,<.01$ ), norms (medium,  $r=.44$   $p<.01$ ) and participation (medium  $r=.56$  ( $p<.01$ ). Attitudes and norms had a significant relationship ( medium  $r=.33$   $p<.01$ ), and attitudes and participation a small significant relationship  $r=.23$  ( $p<.05$ ). Importantly, three variables were positive predictors of

participation in the race: autonomous motivation ( $r = .25$ ,  $p < .05$ ), attitudes ( $r = .23$ ,  $p < .05$ ), intention ( $r = .49$ ,  $p < .001$ ) and perceived behavioral control ( $r = .59$ ,  $p < .001$ ).

Table 4.

## Correlations of scales

Variable	2	3	4	5	6	7	8	9	10	11	12
1 autonomy need	.51**	.60**	.41**	-.20	.18	.22	.25*	.10	.25*	.48**	.46**
2 relatedness need		.48**	.49**	-.13	.19	.24*	.41**	.26*	.04	.41**	.44**
3 competence need			.43**	-.11	.10	.17	.50**	.06	.05	.62**	.43**
4 autonomous motivation				.00	.27*	.33**	.55**	.51**	.12	.51**	.46**
5 Controlling motivation					.08	.14	.05	.08	.07	-.13	-.18
6 Intentions						.90**	.43**	.40**	.49**	-.04	.06
7 Perceived Behavioral Control							.41**	.44**	.59**	.03	.04
8 Attitudes								.33**	.23*	.35**	.08
9 Subjective Norms									.13	.06	.02
10 participation										.02	-.02
11 Enjoyment											.39**
12 Life Satisfaction											1

\* $p < .05$ , \*\* $p < .01$

### Regression-TPB

Logistic regression was conducted on the Theory of Planned Behavior variables using participation as a dependent variable. Intentions, Norms, Attitudes, and Perceived Behavioral Control were entered as predictors. Hosmer and Lemeshow test was well above the .05 threshold ( $p=.921$ ) indicating a good model. Controlling for variables only Perceived Behavior Control was found to have a significant effect ( $p<.05$ ). This means that the belief in their ability to exert control over participation in the race is the most important factor in the model to predict participation. The results do not follow completely with previous results of the theory. It could be that a behavior as demanding as ultrarunning reduces the effect of attitudes, norms, and intentions on the behavior itself. On the other hand in such a case, PBC thus carries greater weight.

Table 5.

Logistic Regression-TPB items

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
Step 1 <sup>a</sup>							Lower	Upper
Attitudes	.386	.608	.402	1	.526	1.470	.447	4.841
Perceived Behavioral Control	1.641	.677	5.881	1	.015	5.162	1.370	19.450
Subjective Norms	-.547	.365	2.253	1	.133	.578	.283	1.182
Intention	.138	.473	.085	1	.771	1.148	.454	2.902
Constant	-6.636	3.580	3.437	1	.064	.001		

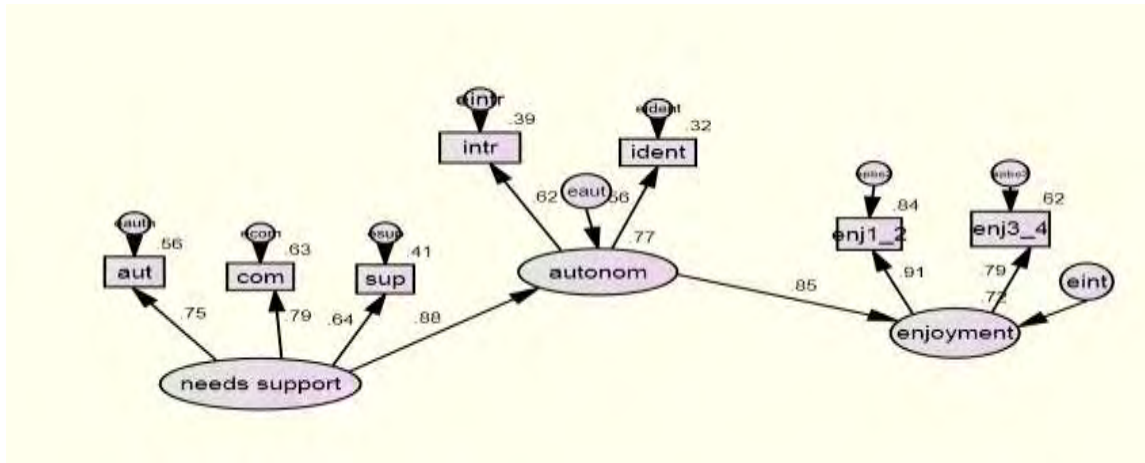
### **Structural Equation Modelling**

Structural equation modeling provides the advantage over path analysis in that it takes care of three assumptions including that variables used in testing a causal model should be measured without error, that error items are not intercorrelated, and that the variables in the model flow are unidirectional (Schreiber, Nora, Stage, Barlow, & King, 2006). Within the models we used the observed variables autonomy, competence, and relatedness to produce the variable needs support. For autonomous motivation, it consisted of the two variables (intrinsic and identified), while controlling consisted of (extrinsic and introjected). Following the recommendations of Little, Cunningham, Shahar and Wildman (2002) parceling used for enjoyment consisted of two indicators (means of 1,2 and 3,4), Intention (1 and 2), PBC (2,3) and life satisfaction (1234, and 5678).

Structural Equation Modelling with maximum likelihood estimations was used. The same recommendations were followed as for the previous confirmatory factor analyses (another type of SEM)

### **Need support-Autonomous Motivation-Enjoyment**

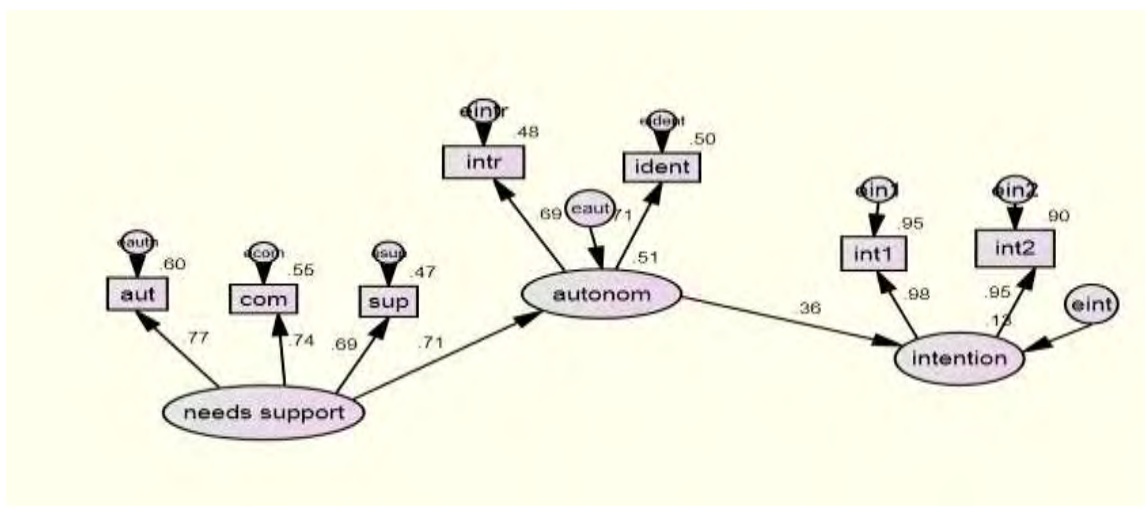
A SEM model was proposed of needs support satisfaction-autonomy-enjoyment. Sample size 85. Results revealed  $\chi^2(12)=20.49$ ,  $d/f=12$ ,  $\chi^2/df=1.7$   $p=0.06$ ,  $TLI=0.896$ ,  $CFI=.955$ ,  $RMSEA=0.092$ , indicating a mediocre model. Need support strongly predicted autonomous motivation ( $\beta=.88$   $p<.001$ ) and autonomous motivation enjoyment ( $\beta=.85$   $p<.001$ ).



**Fig 3.** Model 1: needs support-autonomous motivation-enjoyment

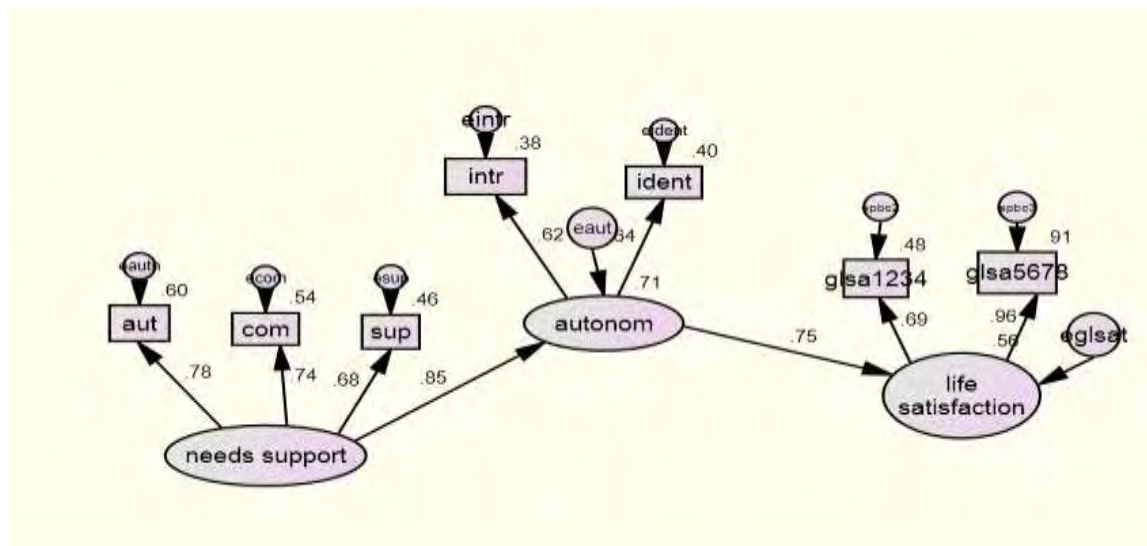
### Need Support-autonomous motivation-intention

A model was proposed between need support, autonomous motivation and intention. Sample size 86. Results revealed  $\chi^2(12)=15.979$ ,  $df=12$ ,  $\chi^2/df=1.3$   $p=.192$ ,  $TLI=.964$ ,  $CFI=.985$ ,  $RMSEA=0.062$ . This indicates that the model fit the data well. Needs satisfaction had a significant strong positive effect ( $\beta=.71$ ,  $p<.001$ ) on autonomous motivation, which in turn it had a statistically significant medium effect on intention ( $\beta=.36$   $p<.001$ ).



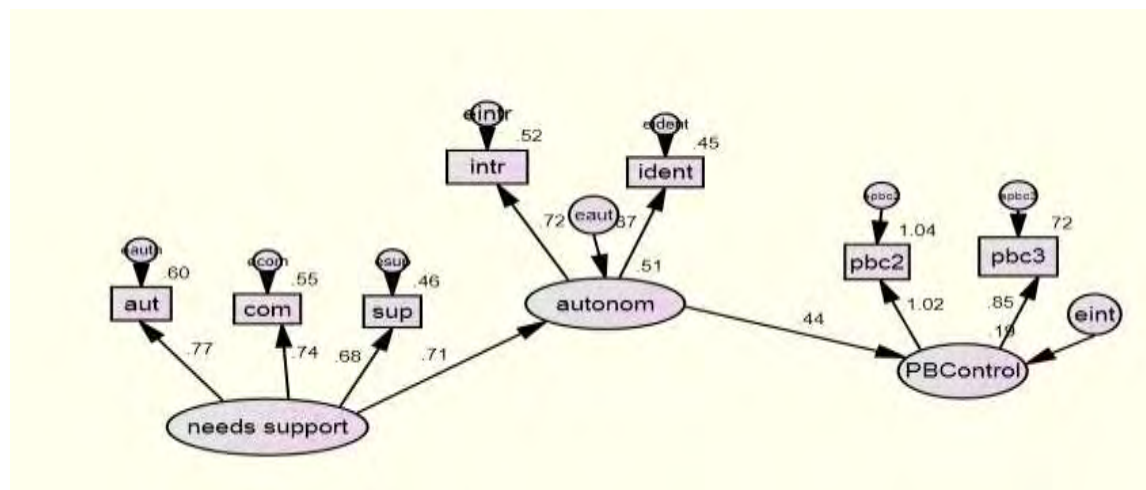
**Fig. 4** Model 2: Need support, autonomous motivation and intention**Need support-autonomous motivation-Life satisfaction**

A proposed model was tested between need support, autonomous motivation, and life satisfaction. Sample size 85. Results revealed  $\chi^2(12)=18.53$ ,  $df=12$   $\chi^2/df=1.54$   $p=.10$ , TLI=.909, CFI=.961, RMSEA=0.080 indicating an appropriate fit. Beta values from one latent variable to the other can be viewed below. Needs support had a large effect ( $\beta = .85$ ,  $p<.001$ ) on autonomous motivation, which in turn had a strong positive effect on life satisfaction ( $\beta = .75$ ,  $p<.001$ ).

**Fig. 5.** Model 3: Needs support-autonomous motivation-life satisfaction**Needs support-autonomous motivation-PBC**

A model was proposed between needs support, autonomous forms of motivation, and perceived behavioral control. Results revealed  $\chi^2(12)=6.449$ ,  $df=12$ ,  $\chi^2/df=0.5$   $p=.892$ , TLI=1.066, CFI=1.00, RMSEA=.000. This indicates a strong regression between needs support autonomous motivation and PBC. ( $\beta=.71$   $p<.001$ ) and moderate between autonomous motivation and PBC ( $\beta=.44$ ,  $p=.01$ ).





**Fig. 6.** Model 4: Need Support-autonomous motivation-PBC

### Needs support-PBC-Enjoyment

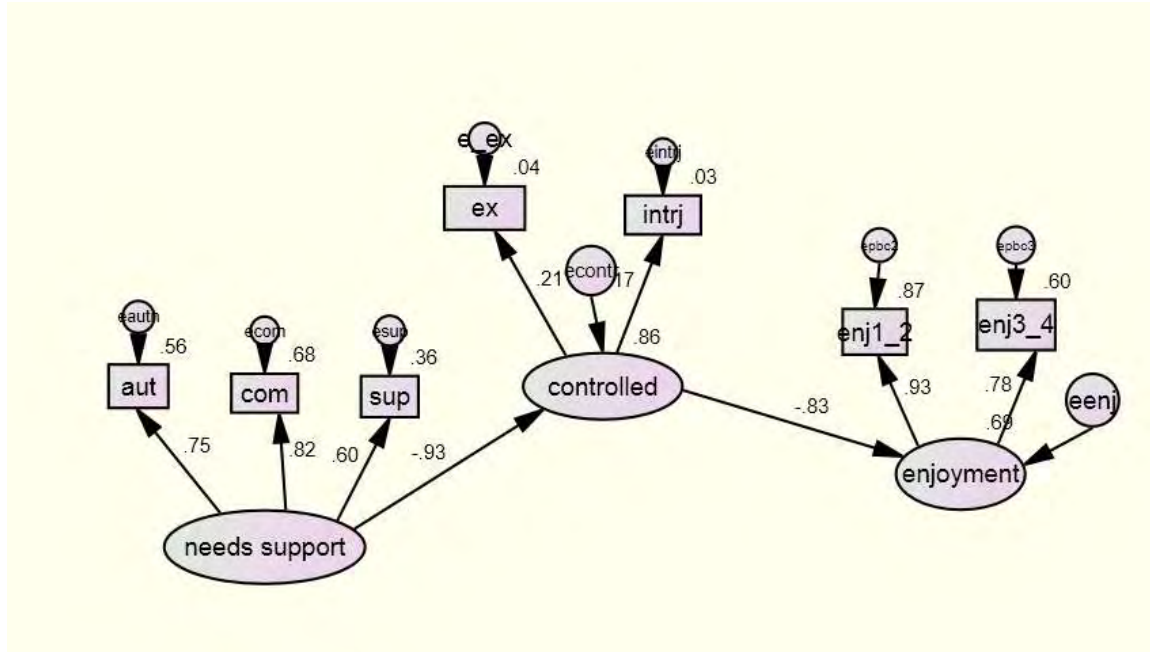
A model was proposed between needs support, perceived behavioral control and enjoyment.

Results revealed  $\chi^2(12)=24.14$ ,  $\chi^2/df=2.02$   $p=0.02$ ,  $TLI=.817$ ,  $CFI=.921$ ,  $RMSEA=.110$ . The probability is less than .05 indicating the data is not a good fit to the model. Further,  $RMSEA >.08$  and  $TLI=.817$  indicates a mediocre fit.

### Need support controlled motivation enjoyment

A model was proposed between need support, controlled motivation, and enjoyment.

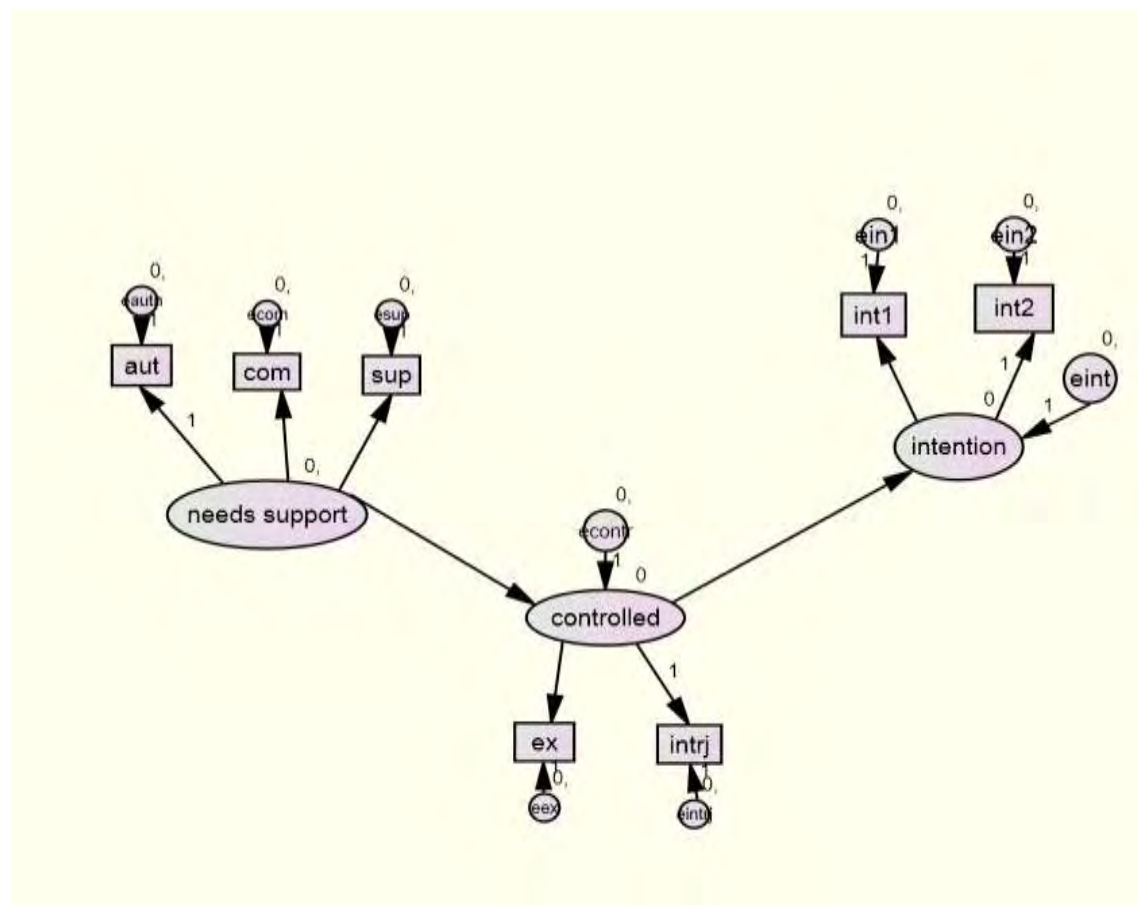
Results revealed  $\chi^2(12)=24.14$ ,  $\chi^2/df=2.02$   $p=0.02$ ,  $TLI=.817$ ,  $CFI=.921$ ,  $RMSEA=.110$ . The probability is less than .05 indicating the data is not a good fit to the model. Further,  $RMSEA >.08$  and  $TLI=.817$  indicates a mediocre fit.



**Fig 7.** Model 5: Needs support-controlled motivation-enjoyment

#### Needs support- controlling motivation intention

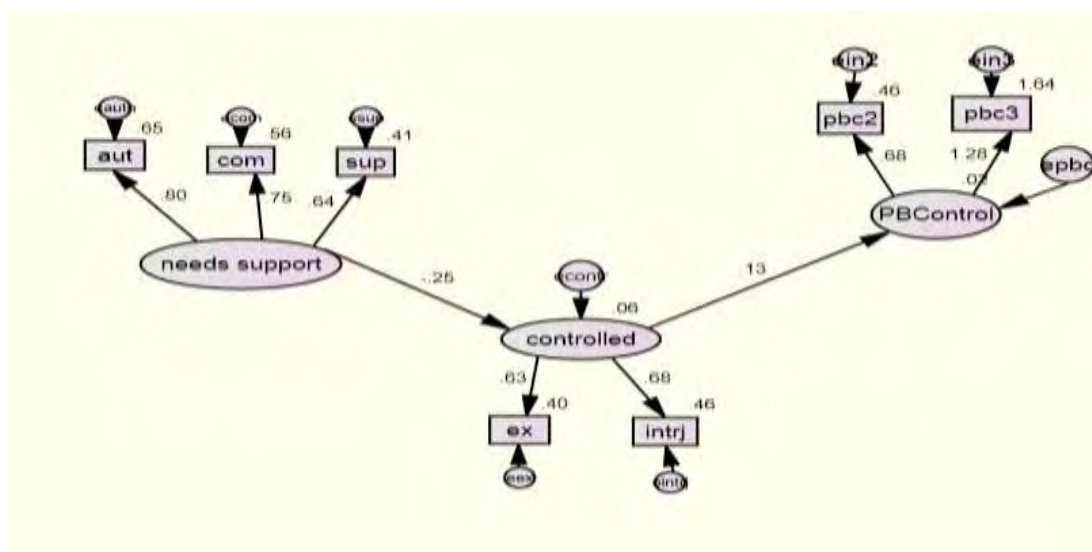
Structural equation modelling was conducted to examine a model between needs support controlling motivation and intention. Results revealed  $\chi^2(12)=17.86$ ,  $p=0.12$  TLI=.943, CFI=.976, RMSEA=.076, indicating a model with good fit to the data. The effects of the needs support to controlled motivation was insignificant ( $\beta = -.24$ ,  $p > .05$ ). Likewise, the effect of controlled motivation on intention was insignificant ( $\beta = .08$ ,  $p < .05$ ).



**Fig 8.** Model 6: Need support-controlling motivation-intention

### Needs support-Controlling Motivation-PBC

We tested the proposed pathway model of needs support to controlling motivations (extrinsic, introjected) to perceived behavioral control. Results revealed  $\chi^2(12)=10.03$   $df=12$   $\chi^2/df=.083$ ,  $p=0.61$ .,  $TLI=1.028$ ,  $CFI=1.000$ ,  $RMSEA=0.000$ . However, the beta values did not reach significance ( $p>.05$ )



**Fig 9.** Model 7-Needs support-controlled motivation-PBC

## Qualitative

### Motives-Three reasons and most important

Motives were arranged according to satisfaction of basic needs and the organismic integration model. Seventy-nine respondents (76 males 96.2% and 3 females, 3.8%) provided three reasons and two persons gave more than three answers which were still placed in the categories. For most important, seventy-eight individuals provided responses (one left the field blank) (75 males 3 females).

*Competence:* Twenty-eight individuals stated an element of competence for their three reasons. These include 'To feel like he can provide everything for himself in the mountain' 'Feel he can overcome everything in order to win the race', and 'Test endurance.' Most important reasons were provided by 10 individuals. Some of these were, 'The challenge of long-distance combined with a few stations support that make adventure racing', 'Physical test to run 100 miles in

solitary environment with few athletes’, ‘In quest of human limits in difficult conditions’, and ‘To test myself along with other athletes’.

Mountain ultratrail runners seem to gain a sense of competence from the various dynamics within the race. One is the challenge of the actual distance. Another is the mental and physical needs to successfully complete it. Additionally, successful strategy and planning within the race (pacing, eating, hydrating) provides another sense of accomplishment. The examples fit within the framework of competence because they refer to the seeking of challenges optimal for their capacities and persist to achieve them (Deci & Ryan, 2002)

*Relatedness:* Thirty-five individuals reported some aspect of relatedness for their three motives. Examples include, ‘Believes he belongs to this part of the group that hardships are a part of their lives,’ ‘I like very much the organizers,’ and ‘The excellent climate between athletes, organizers and volunteers (family)’. Elements of relatedness were reported by 11 individuals as their most important reason. Representative statements were ‘This is a race of emotions and friendships and bonds between athletes are true’, ‘Deposits against our current misery,’ and ‘Organization and the company’.

As more individuals reported motives for relatedness it seems that a sense of relatedness is very important to this type of runner. It is not limited to only fellow runners, but to all of those involved, organizers, and volunteers as well as those who contribute to the satisfaction of their basic need. It goes well with the theory because it is not a certain outcome or attainment, but the sense of community that is important (Deci & Ryan, 2002).

*Autonomy:* Seventeen individuals identified an autonomy related motive as one of their three reasons. These included ‘Solitude,’ ‘Isolation,’ ‘The incredible sense of freedom.’

Six individuals provided an autonomy motive as their most important. Examples were ‘The sense of freedom feeling that I am alive,’ and ‘Solitude, tying with myself.’

It is interesting, and almost paradoxical that ultrarunners are drawn to the sport for the connection to others, but also, as the case for autonomy, time away from others

### **Organismic Integration model**

*Intrinsic Motivation* was the most common reason for participation. For three reasons all provided an answer with some form of intrinsic motivation. Three reasons provided include “The sense of uniqueness you feel during it,” “Loves running on an endless road,” and “Love of the mountain.” Twenty-six reported some intrinsic element in their most important response. Most important reasons include “It is the sense of uniqueness because after you start you are on your own; you need to do proper management of forces as the time passes so you get attached to nature and admire the splendor of it” and “Running marathons as isolated, beautiful, and evocative as this. The perfect match to look deep within yourself.”

All of these reflect according to the theory an internal reason found within the activity itself. It appears that the feeling either of being in nature or in adventure were common themes. There is an associated joy within mountain ultratrail running which has a strong motivational force for these runners.

*Integrated regulation:* was prevalent in 43 individuals for the three motives. In addition, 23 of them included the concept of limit. Three reasons include “Exploration of self-limits,” “For the strength to try myself” and “Dealing with such issues beautifies my life.” Most important

motives were provided by 15 individuals. These include “Mental virtues like patience, effort, continuation” and “The oppression of instincts so I guess I need relief”

The aforementioned motives reflect participation rationales separate from the race itself. These concepts of testing limits or seeing their endurance physical and psychological are their prime motives of participating, and are more important than the race itself. Participation provides a means to this end, rather than their inherent interest and enjoyment of the sport (Deci & Ryan, 2002). Furthermore, it seems to be an important element of who they are.

*Identified regulation* appears to be less common in this type of athlete. Eleven individuals had a motive containing identified elements as their three motives. Examples are “Likes the procedure of proper practice by eating properly so she can be ready for the run,” “Mental connection with the virtues,” “Health” “Emotions.” Most important reasons in this category were reported by four. One’s motive is defined as “Pain management and resources,” while the other reported it was “Part of the training for other matches”. In an attempt to gain conceptual clarity out of the first reason there it seems that their motive for participation is to manage their pain through the race and the resources of the race at the stations.

*Introjected regulation:* Introjected-related motives for three reasons amounted to twelve. Some of these were “Reveal his skills,” and “In 5 years I do not think I will be able to.” Introjected was the most important in one individual. The individual stated ‘I want to make it to the finish line because the previous two I participated in I couldn’t finish.’ This seems to be a self-esteem contingent reason as the pressure is on finishing this year compared to the last years. It seems that if he were not to finish again he would feel disappointed.

*External regulation* None reported within three reasons. Elements were not reported any individuals as most important.

*Amotivation*: Two provided reasons of amotivation. These were “I do not intend to run” and “I am too old for such distances.” Both reasons reflect a disengagement or disinterest in running.

*Other* Several reasons did not seem to fit within the theory. For most important, two reasons did 8 “It is difficult to choose a particular response.”. In three reasons “Just because” and “100 miles” did not seem to fit within the categorically defined theory.

### **Interviews Self-Determination Theory**

Semi-structured interviews were conducted during the weekend of the race. Participants were informed of the interviews prior through email with the questionnaire. During the weekend following their finish or drop-out, 8 interviews were conducted.

#### **Satisfaction of Basic Needs**

*Competence*-Ultrarunning provides a sense of competence, like in the above mentioned exploration of limits. “You realize you have so much power, more than you think,” (47 years old). One mentioned that it provides mental and physical competence. “You get to know yourself better and feel stronger,” (36 years old).

*Autonomy*-None of the participants mentioned feeling controlled to train or run by others, so all believe there is at least some form of autonomy. “The most important you do this for yourself. You do it to find yourself on the trail to find a part of yourself that you cannot find at work or part of your social life. Because it’s all up there.” (44 years old). One mentioned “I am a mountain lover. I go to many mountains around the world and I am also a mountaineer. Mountain ultrarunning is something I like doing in the mountains (36 years old). This represents



his interest in mountains and his choice to do ultrarunning races in locations and mountains of his choosing.

*Relatedness*-All of those interviewed mentioned important others who support them in the race. Some mentioned the co-competitors, others the race organizers or volunteers. The environment of the race was described as a close (supportive) community. In tough parts of a race one runner thinks about "The organizers who are waiting to welcome and hug you (44 years old). As some of the racers come from places far apart, they only see one another during the races, yet still felt very close with them during this time. "When we met we are friends forever but when we are away we don't try to find each other every day to say 'Hi,' but when we are together we feel very close" (38 years old). The bond between the runners, volunteers, and organizers appears to be a very strong one, but due to differences in location of where they live, is limited in meetings to the races. They do speak outside and still feel the connection, but it is not one that is visited regularly or every day.

### **Organismic Integration Model**

*External regulation*-Within the interviews none reported an external regulation.

*Introjected*-Two individuals expressed an introjected regulation. He says "Yea I think in our little society I'm quite known. I started just to yea to do it. Yea to see...to get to now my limits. Ok that was all. But of course you meet people, it changes, it gets bigger...How do you judge yourself? That's the only objective way of judging it. Criteria how your performance is and not judge just a performance. A performance is good or bad compared to others" (47 years old). The representation of judging in relation to others is somewhat internalized as he values it, but his

saying how else do you judge yourself represents an element of externalization as he feels somewhat bound to follow this pattern.

Another said for this race he wished to finish because in the last year he was unable to finish “I made a promise to myself that I would finish. Last year I had dehydration problems” (31 years old). This appeared to involve contingent self-worth. It seemed that he felt disappointment last year when dropping out. Now that he is back he had to finish, and the promise implies additional pressure.

*Identified*-None provided identified reasons.

*Integrated*-All expressed some form of integrated motivation for participation. Most common was within the concept of limits. The concept of limits differed from person to person “more mental than physical” (38 years old) . While another said “We do not know our limits.” These different perspectives are united that running extreme distances allow an opportunity to come close to them. However, in one perspective the limit means going further than one has or thinks, while in another perspective they exist and maybe or not the individual will find them.

While a different perspective involved self-development,

“I think that running is life. You cannot only exercise your body but also your mind. As many people who can be involved with running not only sports generally but running on the mountains. This is the way to have a better society...better relations, less wars, better people” (52 years old).

*Intrinsic Motivation*- Most common were intrinsic motives for participation. All reported intrinsic motives. These included the enjoyment of mountains and nature. “I love...the mountains for me it’s like a second home.” (52 years old). Five individuals said they only do races in the mountains and none in more urban landscapes.

Another element was the aloneness of the race. Ultrarunning by its nature provides long periods by oneself. “I like the sense of isolation. I feel safe running. I feel very safe. The worse the weather is the better I feel.” (48 years old). Another said “I really like the loneliness the nature. The fact that you are away from one type of culture....Everything the mountain the people. Everything is more friendly, actual substance. Everything is real. Everything you find in the mountain is what you see” (38 years old)

### *Other Motives*

One motive that did not fit within the Organismic Integration Model was a father desiring to finish in order to give the medal to his son. “My son to bring him the medal they give you. I promised to give it, to bring it home to him, so this was on my mind.” (48). This does not fit within the model for a number of reasons. The climate was not one of comparing himself to others or gaining medals for himself, which would be a source of negative pressure. However, this could only be described as a compassionate act of giving the earned medal to his son to bring joy to him, not just him winning a medal to make others happy. This distinction provides it as a concept outside of the model. According to Deci and Ryan (2000) external regulation has an externally perceived locus of control, however this motive has an internal locus of control. It would not fit within the other areas such as introjected as it does not appear to contain contingent self-esteem, nor can it be said to be identified as the value of ultrarunning is not an instrumental reason for another purpose. The case of this motive is different than the example of Deci and Ryan (2000) who say identification is when a boy memorizes spelling lists because he thinks it is important to writing, a life goal. In terms of integrated it does seem to be an important aspect of values he has integrated to himself (eg giving joy to his son), yet it did not seem to be a part of his self-evaluation.

### **Theory of Planned Behavior**

*Subjective norms*-Within the interview two individuals reported that they felt a lack of understanding from others in their everyday life. “No I don’t I am doing this because I enjoy it. Sometimes my friends or family don’t understand but that is okay” This reflects that while not necessarily an unsupportive norm, some individuals feel strong support towards their training and racing. One other voiced that “My wife also likes mountain sports so we share it” (36 years old), so the ultrarunning represents a way for them to spend time together. On the other hand, one reported that friends served as his entry in the sport saying “During practices I was training at the stadium for marathons and they were training for ultras and we started talking,” (44 years old)

Another concept is the competitor as a friend rather than foe. “It is nice when you pass another person. But in ultraraces, at least the races I have run when you pass him he is still your friend there are no bad feelings,”. Another athlete reported “I mean in 5 kilometers if you just fall down no one will stop but in this race people will carry you” (48 years old). These represent the belief that ultrarunners have a connection that is not found in other distance runners.

*Intention*-All of those who were interviewed intended to continue to participate in ultratrail marathons in mountains in the future. None of those interviewed mentioned a desire to quit. The main intention was to stay the same (continue to run and race at current patterns) or try new races in new places. “Only that I want to try more races, bigger” (male, 43) Similarly, even the individual who had an extrinsic motivation (revealing of skills) mentioned his intention to “I would like to “Just explore new races and places”(male, 47). One mentioned a specific race he wishes to participate in, “I want to run in UTMB (Ultratrail Mount-Blanc)”, which is a difficult

race and one needing a qualifying standard. This reflects in addition to the new race in a new pace concept, as also a deeper challenge. Finally, another mentioned a desire to stay the same. “The next race. I certainly run two races per year. I run this one and the other is the mythical trail done by these guys and the others.”

*Attitude*-As expected all voiced positive attitudes towards ultrarunning. Words include “I guess you could say I’m addicted,” (47 years old) Another mentioned “For me it is an adventure...Testing myself” (52)

*Perceived Behavioral Control*- As 7 of the eight interviewed finished, their belief in mountain ultratrail running were all high. “I know I have trained for this and I can do it”. Another said “I was just trying to make it back” (48)

*Control Beliefs*-The biggest impediment mentioned was time. Three individuals mentioned this in the interviews. The reasoning for this was due to obligations both familial and work”, “I must watch out not to overdo it. I mean I only train 5 days a week. I also have two children” (31 years old). This represents that he could train more and is a risk for him, but he knows he must limit it in order to spend time with family. Another runner said “You know just working I have 30 days of vacation from work so I have to do everything in those 30 days you know.” (48). This represents that he does not have time to take off for races as he would like, and needs to spend the rest of the time with family. Within races the own mind was viewed as a potential barrier

“Either you are in the place that you can say I am sure because I made every step that I thought necessary to overcome any problem...so probably I can do it whatever I think whatever doubts I have....but the doubts most of the time after a certain point are so strong that you are not logical anymore so you think of only the doubts and only the bad things”(38)

## Discussion

The study provides insight into the experience of mountain ultratrail runners. This particular segment of ultrarunners should be viewed as a distinct group for a number of reasons. In particular several mentioned the mountain and nature as specific motives for their participation. Furthermore, some mentioned they would not run races in cities or more urban landscapes.

Self-Determination Theory was an effective framework into the motives of participation. The reasons for their running fell within the basic needs of autonomy, competence, and relatedness. Additionally, autonomous forms of motivation were the most common, (intrinsic, integrated) and suggest that these runners already show tendencies toward self-determination. The sense of nature and the mountain itself were two very common themes, suggesting that the mountain ultratrail runner is a unique individual, different than ultrarunners whom compete in different types of ultras. The importance of nature as a determinant of runners' behavior is supported by the findings of Doppelmayer and Molekinthin (2004) study who found nature to be an important theme. However, in this group the mountain also was a major motivational force. This does not contradict the findings, but provides evidence that the tendencies of the two groups may be different, as individuals in this group indicated a specific nature interest, the mountain itself, and said they would not run in races without mountains.

Elements of relatedness were very common reasons for participation. The individuals found their fellow runners, the organization, and the volunteers to be important aspects of their experience. Those who fulfilled their relatedness need were more likely to participate similar to previous research (Ntoumanis, 2005). Unlike Stoll, Würth, and Ogles, (2000) social weight concern was largely unsupported as a motive for participation, but psychological health also was important.

Competitiveness does not seem to be an important element in those other than the top few runners. None reported motives regarding beating others in the written questions. Within the interview some runners said it was nice to pass others, but that he is still your friend, indicating a lesser competitive environment. Only one runner mentioned comparison and a desire to beat others. This means that there could be a correlation between finishing time and competitiveness, but as of now none such information is known. However, he also mentioned that his motivation to enter into ultrarunning was not to beat others, but it changed, indicating that some aspect changed as he found himself to be more competent than others.

However, one particular major motive did not fit within the theory. This motive will be referred to as the compassion motive, which involved a father seeking to finish for the medal for his son. It did not produce a source of pressure, but instead of strength. It arguably provided him with more strength than intrinsic reasons otherwise would have. It allowed him to push to finish the race, despite experiencing an injury. There may be potential to study this area in other contexts, as it appears to have potential as a motivational force greater than that of intrinsic motivation, doing it for the pleasure of the activity itself.

Overall the results support a relationship between needs support and autonomous motivation. The Similarly autonomous motivation was linked between the outcomes life satisfaction and enjoyment. (Deci & Ryan, 1985).Autonomous motivation also had a link between intention and also perceived behavioral control.

Within the theory of planned behavior, the regression analysis supported a model, but not within the previous findings (Ajzen, 1979). Instead, it was only PBC that had an effect on participation, whereas in the original model each of the constructs (subjective norms, attitude, perceived behavioral control, and intention) gave some influence. It seems in ultrarunners

attitudes, subjective norms, are not as important as perceived behavioral control in predicting participation. Perceived behavioral control thus would be one of the most important elements of their experience in ultratrail mountain running. Provided by the context of the interviews, it appears that time is a major barrier in their ability to train, and thus to race successfully. Their intentions were only to either stay the same or try new races in new places. Therefore, it seems intention is not as important to them.

Ajzen (1991) stated that perceived behavioral control and self-efficacy are interchangeable. Self-efficacy theory (Bandura, 1977) states that individuals behaviors are based on their ideas of their abilities and capabilities. Four sources of information build self-efficacy. These include past experience, vicarious experience (seeing others do the behavior), verbal persuasion (encouragement from others), and physiological symptoms (such as increases in heart rate). Support has been found for self-efficacy and positive characteristics including squat performance of American football players (Gilson, Chow, & Feltz, 2012), and physical activity levels (Koring et al., 2012). As this construct showed strong evidence within our study, it may be a more valid framework for the future.

From the interviews, the attitude towards ultrarunning appears to be an important element, and very high in these runners. It provides a positive time out in nature and mountains away from others, but also with others who have a similar perspective. However, as the quantitative analysis showed this is not a very significant aspect. This is different than previous research which all elements were found to have significance in predicting the intention of youth to participate in PA (Hagger, Chatzisarantis, Biddle, 2002). A sport psychology consultant however could still focus on the enjoyment, the positive attitude to help build motivation for these athletes.



Controlling motivation was not negatively correlated to items,. It did not show connections with either need support, TPB items, or outcomes. Some individuals said their reasons for entering the sport were either to do it for themselves, or to spend with friends, so thus it seems they are not as likely to feel controlled by others in their participation. The element of friends, instead, seems to fulfill their relatedness support, so it probably enhances their autonomous motivation (Deci & Ryan, 2008).

The present study supports the previous research of Simpson et al. (2012). In their qualitative study they found five themes important to the experience of ultrarunners (preparation, . These can be grouped within the satisfaction of basic needs; autonomy (preparation and strategy, management, discovery), competence (achievement), and relatedness (community). In our study the autonomy elements related more to a sense of adventure, and also an opportunity to be alone (either isolation or solitude). However, at the same time the others in this environment were also of importance, which relates to their concept of community.

### Limitations

One concern was the small sample size. Overall we only had 85 for the questionnaire. However, overall the race is a much smaller field, so it can be said to be much more representative of the field of the run. As our study was conducted in Greece it is important to be cautious about generalizing the findings to ultrarunners from other countries. Culturally, Greece has been found to be more collectivistic than other European countries (Hofstede, 2012). Within a SDT framework when the group norm is more collectivistic than individualistic, having tasks assigned by others builds more intrinsic motivation than in the same situation in an individualistic group norm (Hagger, Rentzelas, & Chatzisarantis, 2014). Therefore, this feeling

of more autonomous motivation may not be exhibited in the same fashion, under the same circumstances in another country.

The interviews were conducted only with those who were present at the race (finishers and a nonfinisher), and those accepted to be our interviewees. Thus, their perspectives and beliefs may not encompass the whole mountain ultratrail runner experience. Similarly, as the questionnaire and interviews were conducted at different times, there may be differential effects, and perspectives may be different in the months leading up to the race, and the actual duration of the event. However, mountain ultratrail runners were found to have a mean ultrarunning experience of 7 years (Hoffman & Fogard, 2012) therefore, their motivation was expected to be more stable.

## Conclusions

The study supports the use of a SDT framework in mountain ultratrail runners. A sense of control over the behavior of mountain ultratrail running is supported as a key element in this study. However, there are many gaps within the psychological literature for ultrarunners and much work still needs to be done in order to understand their experiences. Nevertheless, this study helps to open opportunities to build upon and continue to understand this large growing phenomenon.

Next steps, can utilize an interventional framework to influence ultrarunners' motivations. Self-Determination support in others has been found to increase strenuous and total exercise behaviors (Edmunds, Ntoumanis, & Duda, 2006). Applying a motivational climate (Ames, 1992) framework, the important others can be made to have more supportive behaviors for the athlete. A task-involving climate involves focusing on improvement and learning, while an ego-involving climate focuses on medals and normative comparisons. Task-involving

climates have been found to increase motor skill development (Jaakkola, & Liukkonen, 2006) while an ego-enhancing has shown to have potentially negative health impacts by increasing stress-cortisol responses in a juggling task (Hogue, Fry, Fry, & Pressman, 2013).

As the ultrarunners mentioned the element of others to be an important aspect, a sport psychology consultant could encourage ultrarunners to find a training partner, or spend more time connecting with their friends in ultrarunning.

At the elite level, the climate of the New Zealand rugby team, was found to contain autonomy-supportive elements. In particular, qualitative interviews revealed offering choice (with ownership and responsibility for decision-making), encouraging athletes to take initiative, and using empowering performance feedback (feedback on improving strengths, not just reducing weaknesses (Hodge, Henry, & Smith, 2014). While rugby may be different than mountain ultratrail running, individuals could also benefit from some of these suggestions. In particular a sport psychology consultant could encourage the focus on choosing empowering the athlete to develop new learning strategies, to think outside the box to help themselves improve, and to educate themselves on performance enhancement strategies. For feedback on improving strengths an ultrarunner could focus on what they do well (eg good at keeping a proper eating schedule and nutrition during races), and how they can also improve this.

Future research could also examine differences in level or experience of ultrarunning. Within the single interview the faster runner indicating having a slightly different motivational orientation, however, no conclusions can be made as it could just be an outlier, yet, it does open the window to examine this unique aspect.

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## Appendix A

### **Εν επιγνώσει συναίνεση υπό μορφή για τη συμμετοχή τους σε μια ερευνητική μελέτη**

#### **1. Ο τίτλος της μελέτης**

Ροδόπης Ultrarunners-Motivations κλίμα προθέσεις και αποτελέσματα-ενός μονοπατιού ανάλυση και Mixed-Design

#### **2. Στόχος της μελέτης**

Η μελέτη θα περιλαμβάνει δύο ερωτηματολόγια σχετικά με την εμπειρία της ultrarunners και επίσης συνεντεύξεις με επιλέξετε μερικά για να κατανοήσετε καλύτερα το χώρο της έρευνας, η οποία μέχρι στιγμής είναι σχετικά ανεξερεύνητα

#### **3. Περιγραφή των ερευνητικών δραστηριοτήτων**

Η μελέτη θα περιλαμβάνει δύο ερωτηματολόγια σχετικά με την εμπειρία της ultrarunners και επίσης συνεντεύξεις με επιλέξετε μερικά για να κατανοήσετε καλύτερα το χώρο της έρευνας, η οποία μέχρι στιγμής είναι σχετικά ανεξερεύνητα

#### **4. Κίνδυνοι ενόχληση που συμμετέχουν**

Χωρίς κινδύνους δυσφορία είναι αναμενόμενη

#### **5. Αναμενόμενη επίπτωση**

Η μελέτη θα φέρει στο φως το ultrarunning πληθυσμού έτσι ώστε ο αθλητισμός ψυχολόγοι και το ευρύτερο κοινό να κατανοήσει αυτή τη μοναδική ομάδα.

#### **6. Διάδοση των αποτελεσμάτων**

Τα ερωτηματολόγια θα πρέπει να κατανέμονται τυχαία αριθμούς, ώστε η ανωνυμία μπορεί να τηρείται και κάθε άλλη ενδεχομένως τον εντοπισμό χαρακτηριστικών θα πρέπει να χρησιμοποιείται μόνο για συγκριτικούς σκοπούς (σαν μέσος όρος ετών που συμμετέχουν στο ultrarunning). Οι συνεντεύξεις θα καταγραφεί και ηχογραφήθηκαν λέξη προς λέξη. Ονόματα και συγκεκριμένα ονόματα των πόλεων θα πρέπει να τροποποιηθούν, αλλά γενικά θέματα (δηλαδή από μια αγροτική περιοχή συγκριτικά με μια μεγάλη πόλη, θα διατηρηθεί) για να βοηθήσει να μεταφέρουμε την εμπειρία ενός ultrarunner. Η συνέντευξη πληροφορίες θα εμφανίζονται ξανά για να τη βιντεοσκοπείτε προκειμένου για αποσαφήνιση και έγκριση

#### **7. Περαιτέρω πληροφορίες**

Μην διστάσετε να κάνετε ερωτήσεις σχετικά με το στόχο της παρούσας μελέτης ή την υλοποίηση της μελέτης σχεδιασμού. Εάν έχετε οποιοσδήποτε αμφιβολίες ή ερωτήσεις να μας ζητήσουν διευκρινίσεις.

#### **8. Ελευθερία της συγκατάθεσης**

Είστε ένας εθελοντής συμμετέχων. Είστε ελεύθεροι να αποσύρετε την συγκατάθεσή τώρα ή οποιαδήποτε στιγμή.

### **Συμμετέχοντα, η δήλωση**

Διάβασα αυτό το έντυπο και κατανοώ τις σχετικές διαδικασίες. Συμφωνώ να συμμετάσχουν σε αυτή τη μελέτη.

Ημερομηνία: \_\_/\_\_/\_\_

**[Όνομα και υπογραφή  
του συμμετέχοντος]**

**[Όνομα και υπογραφή  
του ερευνητή]**

**[Όνομα και υπογραφή  
του μάρτυρα]**

## Appendix B

**ΑΝΩΝΥΜΟ ΕΡΩΤΗΜΑΤΟΛΟΓΙΟ** @copyright Α.Παπαϊωάννου & Chris Praetzel πανεπιστήμιο Θεσσαλίας

Με το παρών ερωτηματολόγιο προσπαθούμε να διερευνήσουμε τα κίνητρα και τα συναισθήματα των αθλητών που συμμετέχουν σε αγώνες ορεινών υπεραποστάσεων. Για λόγους επιστημονικούς χρειάστηκε να γίνει τυχαία επιλογή ενός συγκεκριμένου αγώνα κι αυτός είναι ο ROUT. Δεν έχει σημασία ποιες είναι οι στάσεις σας ως προς τον συγκεκριμένο αγώνα και αν σκοπεύετε να συμμετέχετε σ' αυτό τον αγώνα ή όχι, όποιες και αν είναι οι στάσεις σας ως προς αυτόν τον αγώνα απλά αποτυπώστε τις. Δεν υπάρχουν σωστές και λάθος απαντήσεις, σωστή είναι η απάντηση που απηχεί το τι νοιώθει και πιστεύει ο ερωτώμενος. Εάν συμφωνείτε παρακαλώ απαντήστε όλες τις παρακάτω ερωτήσεις.

1. Βάλτε την ημερομηνία γέννησής σας εδώ : \_\_\_\_/\_\_\_\_/\_\_\_\_ (Για παράδειγμα, αν η ημερομηνία γέννησής σας είναι 17 Αυγούστου 1979, παρακαλώ γράψτε: **17 / 08 / 1979**)

3. Το φύλο σας (επιλέξτε ένα μόνο): Άντρας ☐ Γυναίκα ☐

4. Πόλη κατοικίας \_\_\_\_\_

5. Επειδή το ερωτηματολόγιο είναι ανώνυμο αλλά χρειάζεται να συνδέσουμε τις παρακάτω απαντήσεις σας με άλλες που θα ζητήσουμε στο μέλλον (π.χ., αν τελικά συμμετείχατε στον ROUT 100 μιλίων στις 17-8 Οκτωβρίου 2014), παρακαλούμε γράψτε τους τέσσερις τελευταίους αριθμούς του τηλεφώνου που θα δίνετε σε κάποιον διοργανωτή αγώνων που θα συμμετείχατε (π.χ. αν ο αριθμός σας είναι 6947655328 γράψτε 5328) : \_\_\_\_

6. Ποιό έτος/χρονολογία ξεκίνησες των πρώτο σου αγώνα...

(α)...ορεινών υπεραποστάσεων 100 μιλίων ή και μεγαλύτερων; \_\_\_\_ (β)...ορεινών μαραθωνίων/μεγάλων αποστάσεων γενικά; \_\_\_\_

7. Έκανες αθλητισμό (τακτικές προπονήσεις) πριν γίνεις αθλητής ορεινού μαραθωνίου και υπεραποστάσεων; ΝΑΙ\_\_ ΟΧΙ\_\_

Αν ναι γράψε με ποιο άθλημα ασχολήθηκες τα περισσότερα χρόνια \_\_\_\_\_ και πόσα χρόνια έκανες αθλητισμό σ' αυτό το άθλημα \_\_\_\_ (γράψε αριθμό χρόνων)

8. Πόσους αγώνες ορεινών μαραθωνίων και υπεραποστάσεων μαζί έχεις τρέξει συνολικά στην καριέρα σου; Κανένα: ☐ 1-5: ☐ 5-10: ☐ 10-20: ☐ 20-40: ☐ πάνω από 40: ☐

9. Με βάση τις επιδόσεις σου στους αγώνες ορεινών υπεραποστάσεων τα τελευταία 2-3 χρόνια, πού θα κατέτασες τις επιδόσεις σου σε σχέση με τις επιδόσεις των άλλων αθλητών σ' αυτούς τους αγώνες; Κάτω από το 50% ☐ στο 50-40% ☐ στο 30-20% ☐ στο 10% ☐ στο 5% ☐ Των κορυφαίων επιδόσεων

10. Παρακαλώ περιγράψτε τους 3 σημαντικότερους λόγους για τους οποίους θα τρέχατε στον ROUT 100 μιλίων. Εάν δεν σκοπεύετε να συμμετάσχετε στον συγκεκριμένο αγώνα παρακαλώ γράψτε ότι «Δεν σκοπεύω να τρέξω στον ROUT αλλά οι τρεις σημαντικότεροι λόγοι για να τρέξω σε έναν ορεινό αγώνα 100 μιλίων είναι...» (Ανοιχτού τύπου ερώτηση, να απαντηθεί σε 3-10 γραμμές το πολύ)





πολύ    αρκετά    λίγο    έτσι κι έτσι    λίγο    αρκετά    πολύ

εμποδίζουν :-----:-----:-----:-----:-----:-----:-----: διευκολύνουν  
πολύ    αρκετά    λίγο    έτσι κι έτσι    λίγο    αρκετά    πολύ

υπονομεύουν :-----:-----:-----:-----:-----:-----:-----: βοηθούν  
πολύ    αρκετά    λίγο    έτσι κι έτσι    λίγο    αρκετά    πολύ

κλονίζουν :-----:-----:-----:-----:-----:-----:-----: στηρίζουν  
πολύ    αρκετά    λίγο    έτσι κι έτσι    λίγο    αρκετά    πολύ

αποδοκιμάζουν :-----:-----:-----:-----:-----:-----:-----: επιδοκιμάζουν  
πολύ    αρκετά    λίγο    έτσι κι έτσι    λίγο    αρκετά    πολύ

είναι κατά :-----:-----:-----:-----:-----:-----:-----: είναι υπέρ  
πολύ    αρκετά    λίγο    έτσι κι έτσι    λίγο    αρκετά    πολύ

Κύκλωσε τον κατάλληλο αριθμό που δηλώνει πόσο καλά κάθε ένα από τα παρακάτω θέματα σε εκφράζουν

Κατά τη διάρκεια των προηγούμενων 3-4 εβδομάδων, στην καθημερινή μου ζωή αισθάνθηκα ότι...	Διαφωνώ Απόλυτα	Διαφωνώ	Μάλλον Διαφωνώ	Ουδέτερο	Μάλλον Συμφωνώ	Συμφωνώ	Συμφωνώ Απόλυτα
1. Στις περισσότερες περιπτώσεις η ζωή μου είναι κοντά στο ιδανικό μου.	1	2	3	4	5	6	7
2. Οι συνθήκες της ζωής μου είναι άριστες	1	2	3	4	5	6	7
3. Είμαι ικανοποιημένος με τη ζωή μου	1	2	3	4	5	6	7
4. Μέχρι στιγμής έχω πάρει τα σημαντικά πράγματα που θέλω στη ζωή.	1	2	3	4	5	6	7
5. Αν θα μπορούσα να ζήσω τη ζωή μου ξανά, θα άλλαζα σχεδόν τίποτα.	1	2	3	4	5	6	7

Παρακαλώ τσέκαρε ή κύκλωσε τον κατάλληλο αριθμό που δηλώνει πόσο καλά κάθε ένα από τα παρακάτω θέματα σε εκφράζουν

Σκέφτομαι ότι ένας λόγος για να τρέξω στον αγώνα ROUT 100 μιλίων στις 17-18 Οκτωβρίου 2014 είναι...	Διαφωνώ Απόλυτα	Διαφωνώ	Ουδέτερο	Συμφωνώ	Συμφωνώ Απόλυτα
1. Γιατί θα το απολαύσω.	1	2	3	4	5
2. Γιατί τα οφέλη από τον αγώνα είναι σημαντικά για μένα (π.χ., αναπτύσσομαι ως δρομέας, αποκτώ καλή φυσική κατάσταση, συναντώ νέους δρομείς).	1	2	3	4	5
3. Γιατί θα αισθανόμουν ενοχές αν δεν έτρεχα	1	2	3	4	5
4. Γιατί κάποιοι άνθρωποι με πιέζουν να τρέξω.	1	2	3	4	5
5. Για να κερδίσω τον αγώνα.	1	2	3	4	5
6. Αλλά αναρωτιέμαι γιατί να το κάνω.	1	2	3	4	5
7. Γιατί θα μου αρέσει.	1	2	3	4	5
8. Γιατί εκτιμώ πολύ τα οφέλη του αγώνα (π.χ., μαθαίνω νέα πράγματα, γίνομαι υγιής, κάνω φίλους, κλπ).	1	2	3	4	5
9. Γιατί θα αισθανόμουν ντροπή αν δεν έτρεχα.	1	2	3	4	5

10. Για να ικανοποιήσω τους ανθρώπους που θέλουν να τρέξω στον αγώνα.	1	2	3	4	5
11. Για το μετάλλιο/κύπελλο της διάκρισης στον αγώνα.	1	2	3	4	5
12. Αλλά αναρωτιέμαι γιατί να τρέξω.	1	2	3	4	5
13. Γιατί είναι διασκεδαστικό.	1	2	3	4	5
14. Γιατί μου διδάσκει αυτοπειθαρχία.	1	2	3	4	5
15. Γιατί νοιώθω ότι πρέπει πιέσω τον εαυτό μου να συνεχίσω να τρέχω και να μην τα παρατήσω.	1	2	3	4	5
16. Γιατί αισθάνομαι πίεση από άλλους ανθρώπους να τρέξω.	1	2	3	4	5
17. Γιατί θέλω να κερδίζω διακρίσεις (π.χ., ο αθλητής του αγώνα).	1	2	3	4	5
18. Αλλά οι λόγοι για να τρέχω δεν είναι ξεκάθαροι πια σε μένα.	1	2	3	4	5
19. Γιατί το βρίσκω συναρπαστικό.	1	2	3	4	5
20. Γιατί είναι ένας καλός τρόπος να μαθαίνω πράγματα τα οποία θα είναι χρήσιμα στην ζωή μου.	1	2	3	4	5
21. Γιατί θα αισθανόμουν αποτυχημένος/η εάν δεν έτρεχα.	1	2	3	4	5
22. Γιατί αν δεν το κάνω κάποιοι άνθρωποι δεν θα είναι ευχαριστημένοι μαζί μου.	1	2	3	4	5
23. Αλλά αναρωτιέμαι ποιος ο λόγος να συνεχίζω να το κάνω αυτό.	1	2	3	4	5
24. Για να κερδίσω μια κορυφαία θέση.	1	2	3	4	5
25. Γιατί θα ένιωθα να είμαι σε δύσκολη θέση αν δεν συνέχιζα.	1	2	3	4	5

<b>Στις προηγούμενες 3-4 εβδομάδες πριν ή κατά τη διάρκεια της προπόνησης για αγώνα ορεινών υπεραποστάσεων ...</b>	<b>Διαφωνώ Απόλυτα</b>	<b>Διαφωνώ</b>	<b>Ουδέτερο</b>	<b>Συμφωνώ</b>	<b>Συμφωνώ Απόλυτα</b>
1. Απολάμβανα το τρέξιμο	1	2	3	4	5
2. Έβρισκα το τρέξιμο ενδιαφέρον.	1	2	3	4	5
3. Έβρισκα ότι ο χρόνος περνούσε πολύ γρήγορα καθώς έτρεχα	1	2	3	4	5
4. Διασκέδαζα πραγματικά όταν έτρεχα.	1	2	3	4	5

<b>Στις προηγούμενες 3-4 εβδομάδες πριν ή κατά τη διάρκεια της προπόνησης για αγώνα ορεινών υπεραποστάσεων ...</b>	<b>Διαφωνώ Απόλυτα</b>	<b>Διαφωνώ</b>	<b>Ουδέτερο</b>	<b>Συμφωνώ</b>	<b>Συμφωνώ Απόλυτα</b>
1. Φοβόμουν ότι δεν θα τα πήγαινα καλά.	1	2	3	4	5
2. Φοβόμουν ότι η απόδοσή μου θα απογοήτευε κάποιους.	1	2	3	4	5
3. Φοβόμουν ότι δεν θα έτρεχα όσο καλύτερα μπορούσα.	1	2	3	4	5
4. Φοβόμουν ότι θα έτρεχα άσχημα.	1	2	3	4	5
5. Φοβόμουν ότι θα τα πήγαινα χάλια κατά τη διάρκεια του αγώνα.	1	2	3	4	5

Κατά τη διάρκεια των προηγούμενων 3-4 εβδομάδων στην καθημερινή μου ζωή...	Διαφωνώ Απόλυτα	Διαφωνώ	Ουδέτερο	Συμφωνώ	Συμφωνώ Απόλυτα
1. Αισθανόμουν γεμάτος/η ενθουσιασμό.	1	2	3	4	5
2. Είχα μεγάλα κέφια.	1	2	3	4	5
3. Έβλεπα αισιόδοξα την κάθε μέρα.	1	2	3	4	5
4. Σχεδόν πάντα αισθανόμουν εγρήγορση και επαγρύπνηση.	1	2	3	4	5
5. Αισθανόμουν ότι είχα πολύ ενέργεια.	1	2	3	4	5

Κατά τη διάρκεια των προηγούμενων 3-4 εβδομάδων, στην καθημερινή μου ζωή αισθάνθηκα ότι...	Διαφωνώ Απόλυτα	Διαφωνώ	Ουδέτερο	Συμφωνώ	Συμφωνώ Απόλυτα
1. Γενικά, είχα πολλά για τα οποία ένιωθα υπερήφανος.	1	2	3	4	5
2. Γενικά, σε όλα ήμουν καλός/ή.	1	2	3	4	5
3. Τα περισσότερα πράγματα που έκανα, τα έκανα καλά.	1	2	3	4	5
4. Τίποτε από αυτά που έκανα δεν πήγε λάθος.	1	2	3	4	5
5. Γενικά, τα περισσότερα πράγματα που έκανα, βγήκαν καλά.	1	2	3	4	5

Γενικά, στη ζωή μου ...	Διαφωνώ Απόλυτα	Διαφωνώ	Ουδέτερο	Συμφωνώ	Συμφωνώ Απόλυτα
Το μέλλον μου φαίνεται καλό	1	2	3	4	5
Διασκεδάζω τη ζωή πιο πολύ από ότι κάνουν οι περισσότεροι άνθρωποι	1	2	3	4	5
Είμαι ικανοποιημένος/η με τον τρόπο που πραγματοποιούνται τα σχέδια της ζωής μου	1	2	3	4	5
Τα βγάζω πέρα καλά με τα πράγματα στη ζωή μου που δεν μπορούν ν' αλλάξουν	1	2	3	4	5
Οτιδήποτε κι αν συμβαίνει, μπορώ να δω την φωτεινή πλευρά	1	2	3	4	5
Διασκεδάζω που ζω	1	2	3	4	5
Η ζωή μου φαίνεται γεμάτη σημασία σε μένα	1	2	3	4	5
Η ζωή μου είναι στο σωστό δρόμο	1	2	3	4	5

Στην προπόνηση για αγώνες ορεινών υπεραποστάσεων τις τελευταίες 3-4 εβδομάδες	Διαφωνώ Απόλυτα	Διαφωνώ	Ουδέτερο	Συμφωνώ	Συμφωνώ Απόλυτα
1. Αποφάσιζα πώς ήθελα να εξασκηθώ.	1	2	3	4	5
2. Νόμιζα ότι είμαι αρκετά καλός/η.	1	2	3	4	5
3. Αισθανόμουν ότι οι άνθρωποι με υποστηρίζουν.	1	2	3	4	5
4. Είχα γνώμη σχετικά με το τι είδους προπόνηση ήθελα να κάνω.	1	2	3	4	5
5. Ήμουν ικανοποιημένος/η με αυτά που έκανα.	1	2	3	4	5
6. Αισθανόμουν ότι οι άνθρωποι με καταλαβαίνουν.	1	2	3	4	5
7. Ήταν επιλογή μου να τρέχω.	1	2	3	4	5
8. Ήμουν ικανοποιημένος με τους χρόνους μου στις προπονήσεις.	1	2	3	4	5
9. Αισθανόμουν ότι οι άνθρωποι ακούν την άποψή μου.	1	2	3	4	5
10. Ένοιωθα ελεύθερος να κάνω πράγματα με το δικό μου τρόπο.	1	2	3	4	5
11. Αισθανόμουν πολύ ικανός/η.	1	2	3	4	5
12. Αισθανόμουν ότι οι άνθρωποι μου δίνουν αξία.	1	2	3	4	5
13. Αισθανόμουν ότι έχω πολύ καλή απόδοση.	1	2	3	4	5
14. Είχα κάποιες επιλογές για ό,τι έκανα.	1	2	3	4	5
15. Νόμιζα ότι τα πήγαινα αρκετά καλά.	1	2	3	4	5

### Appendix C

**Qualitative**

How old are you?

How long have you been running for? Did you play other sports prior to beginning running/ultrarunning?

Do you work? How much do you work?

2 broad questions to start Moustakas 1994

- What have you experienced in terms of the phenomenon?

What contexts or situations have typically influenced or affected your experiences of the phenomenon?

Others may be asked but these two specifically help to focus on data collection and helps lead to a textual and structural description?

**Activity Behavior**

What do you think about when you run long distances?

How often do you run ultraraces?

How many years have you been involved with ultraraces?

Did you do other distances prior to this?

If so, which?

For how long?

**Attitudes**

What are your attitudes towards ultrarunning?

Is there anything positive about ultrarunning? Which is most important to you?

Is there anything negative about ultrarunning? Which is the most important?

**Motivation to participate**

What made you decide to enter into ultrarunning? Why

What were the reasons that made you get involved with ultrarunning?

Which one is the most important for you?

What motivates you to train to run these distances? Why?

why is this so important/central to you?”,

how is this connected to your philosophy/ or to the meaning of your life

... Some runners say that running helps them to explore their limits would you agree or disagree?  
Why or why not?

If so what does this term limit mean to you?

Would you suggest-recommend this sport activity to your friends? Why (yes-no)?

#### Benefits to participating and outcomes

What do you gain from participating in ultrarunning? ., Some people (ultra runners) believe, say, support that they participate in order to gain glory, money or to be recognizable do you agree to this statement? Etc

Do you feel pressure from others or yourself to ultrarun? If both which is more powerful? How?

Do you feel sometimes internal pressure, that you have to run for a reason, and if yes does it help you or does it harm you?"

Do you sometimes feel pressure to beat or compare yourself to others? Or from those around you?

Do you feel guilty if you do not or are unable to run? Or from others How?

Do you sometimes feel pressure to ultrarun in order to develop self-worth? Or from others?

Do you sometimes feel pressure to ultrarun to improve your health or physique? Or from others? If so how much? Is the goal a meaningful part of who you are?

Have you learned anything from your engagement with ultrarunning?

Do you hope to learn anything from ultrarunning?

How has ultrarunning affected you?

What emotions does running give you?

#### Any losses from participating

Do you feel you miss out on anything through ultrarunning and/or training?

Do you feel that there were any harmful effects from ultrarunning?

### Intentions

- What are you going to do regarding ..... during the next week, month, year etc
- What are you planning to do.....
- Are you sure about .....
- How sure, certain, confident are you for this?

Are there any barriers you have to run ultra distances?

How you cope with.....

Do you have a specific strategy to cope with obstacles-barriers...?

Are there any you cannot overcome?

What are your future goals for ultrarunning?

What would you want others to understand about ultrarunning?

## Appendix D

### Three Reasons Categories

Competence (Test skills/limits) (Test limits) (to try) (See if he can last) (Test limits of her endurance) (Loves to combine tough goals to achieve in such an environment) (Long road with few supply stations) (Difficulty of the race) (To feel like he can provide everything for himself in the mountain\*) (Feel he can overcome everything in order to win the race) (Test endurance) (test physical limits).....(The challenge of long-distance combined with few stations support)(This is a big test for me) (To participate in a difficult athletic challenge) (Physical test to match (100 miles)) (To test my endurance) (people and organization) (correct difficulty and nature) (Because I think that I can now)(The biggest challenge at 100 miles in Greece) (For the challenge) (Detached challenge of 100 miles in a remote area)(Test of my endurance) (Difficulty) (Difficulty level) (Desire to test himself) (Challenge of distance combined with minimum supply) 28

Relatedness (To enjoy the road, the mountain, to meet new friends) (See his mountain friends) (Race organizer company) People that organize it) (Believes he belongs to this part of the group that hardships are a part of their lives) (Enthusiasm and taking care of volunteers) (Meet the whole ROUT family) (coexist with athletes of this category).....(people) (the friends) (I like very much the organizers) (The company which we participate together in big matches)(The excellent climate between athletes, organizers and volunteers (family)) (A journey where you will meet important and interesting people) (To run a 100 mile race in the home of my ancestors)(We might encounter friends) (cause the organization consists of lovely people) (For the experience with other athletes in the mountains without any outside help) (organization) (To catch-up with many good friends and tie with them through the race) (organizers) (To feel the special atmosphere of this game and especially the climate of the family of ROUT) (I want to run



this race with friends to feel the joy together-I hope I finish) (I liked the route-like the atmosphere (organizer, volunteers, teammates) (Company)(contact with other athletes, organization) (To find friends who have the same perception of the ultra-mountain) (The climate between athletes is family, there is no competition) (Volunteers are friends at stations. I was a volunteer two years ago.)(DINTR-Friends)(Meet interesting people) The experience of another great match for people who expect to always be laughing at stations) (DINTR-Family-like environment, make friends and we all experience the same emotions) (Contact with other runners and feast at the end) (Be a member of those who experience the ultra) 35

Autonomy (Solitude) (Solitude) (To feel like he can provide everything for himself in the mountain) (Wants to feel independent) (isolation)..... (For the experience with other athletes in the mountains without any outside help) (The ultimate freedom) (The incredible sense of freedom) (Organize my free time) (Isolation)(solitude-tying with myself) (Few stations-adventure) (The minimal support to fight the nature of Rodopi)(isolation) (It is a struggle of introspection during most lonely)(Freedom) (DINTR-Challenge of distance combined with minimum supply) 17

(I cannot run???) (Just because)(100 miles?) 3

Amotivation (Does not intend to run.) (Does not intend to run rout but curious to see if he can make it) 2

Extrinsic motivation

External Regulation

Introjected Regulation (Reveal his skills) (Personal bet with himself) ..... (Part of my training for other matches) (In 5 years I do not think I will be able to) (See new places)(Owe to myself) (To satisfy personal ambition) (Tolerance) (Esteem) (External support is required as a minimum but also strategy, alertness and mental clarity) 10

Identified Regulation (Control of Emotions) (Patience) (meaning of this ride) (See if he has what it takes to survive that) (Likes the procedure of proper practice by eating properly so she can be ready for the run) (mental connection with the virtues)(Emotions) (Intensity) (Self-awareness) (Resource management and pain) (Self-punishing/atonement behavior)(Health) 11

Integrated Regulation (Test skills/limits) (Test limits) (Likes to run with his heart and not his feet)(Test limits) (to see his endurance physical and psychological) (To feel the philosophy of the tournament) (Exploration of personal limits) (limits of her pain) (Explore his limits) (through the route to pass the physical and psychological limits) (What his personal limits are) (Sees this as a challenge to test limits) (to see if she has what it takes to put herself through such psychological and physical trial) (Exploration of self-limits) )) .....(Exploration of limits)(Limits of myself) (Development) (Push boundaries) (Test the limits of myself) (overcoming) (For the strength to try myself) (You run the ROUT 100 miles for an adventure to live) (Adventure that I think fits my character) (I fit very well the ideology of route) (Experience in pain) (To fill batteries to enjoy) (self-liberating) (Test must be limits) (Face to face with personal limits) (To go one step beyond my limits (mentally and physically) through the preparation and the race)(Exploring my inner limits) (Dealing with such issues beautify my life) (organized health-conscious) (To test my limits (physically and mentally) (The introspection required by the isolation of the race) (To get my body to the limits and overcome them) (To experience running and isolation on mountain Rodopi) (To charge my batteries) (test limits) (To

acknowledge my limits) (DINTR-Extension of personal limits)(Pain management and resources)(Overcome myself)(To find my limits (if any)) 44 (23 had the word limit)

Intrinsic motivation (Experience) (Environment of the run) (((Personal Pleasure) (Adventure) (experience) (love of the mountain) (Adventure on an unknown place) (Experience) (To enjoy the road, the mountain, to meet new friends)(To live the experience)(Adventure)(Experience)(The experience) (Test limits) (the beauty of the place) (Adventure) (Nature) (Enjoyment of crossing the finish) (Enjoy the road)(Beauty of the road) (Likes the mountain) (Loves running on an endless road) (This ride is unique) (Likes to run through the nature of Rodopi) (Fun and experience of the road) (The joy of the ride) (Contact with nature) ...(Nature) (I like it) (Contact with nature in a magical place) (Adventure) (The mountain) (The adventure) (mountain lover) (adventure) (Enjoy the Rhodope mountain generally) (Natural landscape) (For the beauty of the natural environment) (Experience of the race) (The beauty of the forest of the Rodopis) (The sense of uniqueness you feel during it) (Contact with nature) (Enjoy the outdoor environment in Northern Greece) (For the experience-the collection of images, feelings) (Familiar environment) (Adventure) (incredible nature) (Because the region is wonderful) (For the sense of adventure it offers) (Because I like the adventure) (The running in nature) (Unique beautiful way) (Unique adventure) (ultra beauty) (For the feeling of finishing)(Nature) (Change of location)(the run at night) (The landscape-nature, trails) (For the experience) (To get lost in the experience)(Beauty and contact with nature, feelings and psychology during the match) (Dawn after 24 hours of racing) (Experience) (Adventure)(virgin (unspoilt) natural environment) (location route) (Trail) (adventure) (experience)(Contact (relationship) with the creation) (Live long in the wilderness (30-40 hours)) (The rally route is about the prettiest in our country) (The route-run in Rodopi-run the night)

(DINTR-Nature) (The unique lifetime experience every time) (The trip) (The ride in the mountain) (ENDORPHINS???) (Adventure) (For images of Rodopi) (Adventure) (Night running) (DINTR-Contact with Virgin forest Rodopi) (4<sup>th</sup> reason given The beauty of the fight.) (Sightseeing) 86

DINTR=do not intend to run but three reasons are...

## Appendix E

### MOST IMPORTANT\_ MOTIVES SDT

#### Basic Needs or Organismic Integration Model

Competence (The challenge of long-distance combined with a few stations support that make adventure racing) (Physical test to run 100 miles in solitary environment with few athletes. In quest of human limits in difficult conditions) (To test myself along with other athletes) (Unique Games and location but mainly the difficulty in that aid stations are far from each other and the real opponents are sense of us lost in a universe which has a length of 160 kilometers) (because I think that I can) (Difficulty) (Desire to test himself) (Contact with virgin forest and the opportunity to go to places that are difficult to reach)(The first to find my limits, to seek hidden forces within me) (Loves to combine tough goals in such an environment) (Finish the race) (finish) 12

Relatedness (the contact with nature and a non-competitive people) (I Like very much the organizers) (I fit the ideology of ROUT and share with others) (organization) (The organizers) (Company) (This is a race of emotions and friendships and bonds between athletes are true. Deposits against our current misery) (the people of the organization and the warmth) (It is a struggle of introspection, during most lonely and family, and also make friends, also the characteristic of the sport that we all experience the same emotions)(to see runner friends)(organization and the company)(Believes he belongs to this part of the group that hardships are the part of their lives) 11

Autonomy (It is the sense of uniqueness because after you start you are on your own, you need to do proper management of forces as the time passes so you get attached to nature and admire the splendor of it) (Solitude, tying with myself) (Be found in conditions of semi-autonomy to

acknowledge my limits) (The sense of freedom feeling that I'm alive)(It is a struggle of introspection, during most lonely and family, and also make friends, also the characteristic of the sport that we all experience the same emotions) 6

(I DO NOT KNOW) (difficult to choose a particular response) 2

Amotivation (I'm too old for such distances)(Does not intend to run) 3

### Extrinsic motivations

#### External regulation

Introjected regulation (I want to make it to the finish line because the previous two that I participated I couldn't finish) (part of my training for other matches))

Identified regulation (Pain management and resources) (emotions???) (to control emotions)

Integrated regulation (mental virtues like patience, effort, continuation) (The oppression of instincts so I guess I need relief) (Self-esteem) (To go a step beyond my limits (mentally and physically) mainly through the preparation and race) (believe will be a unique experience to test your limits) (To get my body to the limits and overcome them) (contact (relationship) with the creation) ) (This is a race of emotions and friendships and bonds between athletes are true.

Deposits against our current misery) (The first to find my limits, to seek hidden forces within me)(Test limits)(Run with his heart and not his feet)(Limits)(Testing limits) (To see his endurance physical and psychological) (limits)

Intrinsic motivation (the contact with nature and a non-competitive people) (because I like)

(mountain lover) (the mountain) (the adventure in the beautiful nature of the Rhodopes) (It is the

sense of uniqueness because after you start you are on your own, you need to do proper management of forces as the time passes so you get attached to nature and admire the splendor of it) (Enjoy the outdoor environment in Northern Greece) (pleasure) (adventure)(the beauty of the place is so great that it makes me not want to finish) (Running in nature and mainly mountain) (the joy of participation) (Hobby that makes living) (Running marathons as isolated, beautiful, and evocative as this. The perfect match to look deep within yourself) (The third because the finish is no longer reasonably close and what more beautiful to see a second sunrise without sleeping at all) (Location, nature) (The route-run in rodopi-running in the night) (Nature) (The journey) (Ride the mountain) (Adventure) (Contact with virgin forest and the opportunity to go to places that are difficult to reach) (Personal pleasure)(Adventure)(Adventure)(adventure) (Finish the race) (finish)

## Appendix F

Author pilot interview Qualitative

2 broad questions to start Moustakas 1994- What have you experienced in terms of the phenomenon?

In terms of ultrarunning I have experienced a lot of joy and heightened awareness and understanding of myself and life in general. It has helped me to know and believe that I can accomplish anything I set my mind to. It has taught me that little efforts over time accomplish very big things. It has helped me to become more loving and understanding of other people. It has helped me to become more peaceful and less susceptible to anger. It is very cathartic

What contexts or situations have typically influenced or affected your experiences of the phenomenon?

I mostly ran on country roads and prefer to be away from everything. I usually warm up on my track where there are other runners. This provides an opportunity to socialize briefly with strangers with a customary hello or how are you. Following this I mostly run on roads or trails. I occasionally see other runners and almost all of them provide a friendly hello or wave. In the actual races both before, during and after, I meet some of the nicest people in the world. They all want to talk and get to know one another even if you know you may never see one another again. In Scotland a man and his wife gave me a ride all the way back to my apartment just because they lived a couple of towns over. For my run across America it really showed me the kindness of people. Even just giving a bottle of water or something can really make your day, and I cannot count the number of times I was helped along the way.

Others may be asked but these two specifically help to focus on data collection and helps lead to a textual and structural description?



### Activity Behavior

How often do you run ultraraces? I have run in total one ultramarathon and a 4 month run across America. If possible I would like to do at least one longer run race a year. I am currently concentrating on the marathon distance at this time to help provide more speed in later years.

How many years have you been involved with ultraraces? Did you do other distances prior to this? If so, which? For how long? I ran my first ultra at the age of 20 so in total 4 years. Yes marathons for 2 more years and running in total 10 years.

### Motivation to participate

What made you decide to enter into ultrarunning? I wanted a bigger challenge. After 2 marathons I no longer felt the distance as such an accomplishment. I then ran a marathon in the desert with a 35lb pack. Then I ran my first ultra a double marathon. Then I decided to run across America. It was something I thought about for 2 years. From the first moment it entered into my head I knew it was something I could accomplish and really wanted to do.

What motivates you to run these distances? I sense of dissatisfaction with the monotony of everyday life. I need a sense of adventure and challenge and growth. These races provide that for me.

What motivates you to train to run these distances?

Knowing that with each race I have a chance to go further, faster, and examine a part of myself that I feel most people never get to experience. Maybe it can be described as a return to the primal. A return to the roots of man that technology and the comfort of our lives today has stripped away.

### Attitudes

What are your attitudes towards ultrarunning? Anyone can do it. It is an awesome environment and a great healthy addiction to have.

What do you view positively about ultrarunning? The community and the fact that it crosses over to other parts of your life. The fact that I can run an ultramarathon teaches me that I can also study in Europe, become president of my class, or accomplish other dreams.

What do you view negatively about ultrarunning?

The time commitments. It takes a lot of sacrifice to be successful. It can be very lonely.

#### Perceived benefits to participating and outcomes

What do you gain from participating in ultrarunning?

What have you learned from ultrarunning?

What do you hope to learn? I hope to continue to grow and push my boundaries so that I can reach my full potential in all aspects of life./

How has ultrarunning affected you? Given me more hope

What emotions does running give you?

#### Any perceived losses from participating

Do you feel you miss out on anything through ultrarunning and/or training?

Do you feel that there were any harmful effects from ultrarunning? Injuries and a need to run every day to reset my mind and to feel good. I can begin to feel stressed and anxious if I am unable to take a day off. It can also make me very irritable.

What are your intentions for ultrarunning at this point in time? Have they changed over the last three months? If so how? Over the last couple of years? I want to run at the marathon level and get my time to the low 2 hour mark. Around 31 I may return to the ultra level. No have stayed the same but over the last couple of years have changed. Ultras are also expensive and people peak later so I wanted to develop my speed so that may help me when I begin to peak for ultras, after I have peaked at the marathon level.

What barriers do you have to ultrarunning? Time money

How do you overcome them? Are there any you cannot overcome? Sometimes time. I have often had to lose sleep and run at 2 3 in the morning. Money is a tough one, harder than time.

What do you think about when you run long distances? Everything and nothing it is a paradox. I sometimes can go a couple of hours and just be lost in the run. I no longer have worries, desires, stresses angers. I just run. Other times I reflect a lot on my life. Sometimes it makes me feel detached or a third party observer to my life and problems. Running forces me to examine things from other angles and this helps me reduce some bias and be more loving to others and sometimes myself.

What are your future goals for ultrarunning? Eventually marathon des sables possibly badwater and some mountain races.

What would you want others to understand about ultrarunning? We are crazy but just accept us for who we are. Allow us to run when we NEED to run. Please do not diminish the enjoyment of the run. It is not always fun to run, and some runs are downright awful. However, the road

continues to call us forth and we feel a great sense of fulfillment when we are able to get out on the road.

Anything else to add?

It is an opportunity to connect with God. To find him where I have been unable to find him in everyday life. I feel him watching over me, next to me, and through me. I do not feel as helpless or off alone on my own. This is the way I would frame the **runner's high**.

## Appendix G

Transcription Pilot interview

Hey Cory how's it going?

CR 'Good how are you?

CP "Good everything's going well how's the family all doing?

CR Good they wanted to say hello.

I Can't see my little screen can you see mine O there we go

Um no I can't see you either?

SO What are you doing over there? In Is it Germany?

Yea I'm in Germany now. I'm working on a Master's Degree so I was in Greece for a semester and now 'm in Germany and I'll go back to Greece in the fall. I've been very lucky I got a good scholarship and I've been over in Europe since September.

Chris: How's the running going? I saw the 100 mile on the track

CR 'Yea it's going good.' I..That's nothing compared to what you did.' It's still very impressive.

"Yea you know how it was like when it's this hot I would prefer to be on a trail. It was so hot that I couldn't get that far from water. I wouldn't have been able to get very far before I would have needed to come back and refill my pack. The track worked out okay, I always had everything I needed there.

For my thesis I am doing it on ultrarunning...

Trail race in the fall so we developed some interview questions and we need to run a pilot on someone not running the race to make sure the questions are good

Chris How old are you?

CR I am 36.

Chris And how long have you been running Cory. I did my first marathon in 2009 so I guess what 5 years 5 and a half years.

Chris: And did you do others sports prior to starting your first marathon?

CR I played basketball as a kid but nothing major.

Chris And I know we talked about this before about I forget the name of it? Donor Services?

CR 326 (Unrecognizable) for Kidney failure

Chris And how long have you done it for?

CR 10 years.

Chris And is it full-time?

CR Yes

Chris So like 40 hours?

CR Yea

Chris This is a broad general question to start what have you experienced in terms of ultrarunning?

CR Well gosh that's a good question. I really really like the scenery that's involved in ultrarunning you cover more scenery so you get to see more and also I'm really drawn to the community of ultrarunning and a race doesn't really feel like a competition. It feels like everyone's working together to get to the finish line. It's just a really supportive and encouraging group of people.

Chris Ok awesome.. And what situations...

CR: Umm I think there's two parts to it. The training itself is enjoyable. I really like the training.

If you didn't like the training you wouldn't be doing this. Just the aspect of challenging myself and pushing to see how much I am capable of. So I really enjoy the training aspect and

the races are kind a reward for all of the hard work you have put in. So I really like both. So I really like the training and also the races.

Chris So the

CR Umm I would say my attitude is really encouraged I guess, supported, and umm I think that it's a umm good thing mentally too to feel that you've accomplished something really hard that umm took some time and dedication

Chris And is there anything negative about ultrarunning

CR Umm yea there are definitely times where running is hard and you know how it is. there's highs and lows. And I think that's, that's part of what I like about the sport in general. You experience really the lowest of lows but then those are matched by the highest of highs. So those low points are pretty tough umm feeling like gosh how am I gonna do this or I just want to give up or this is such a dumb hobby to have this is so pointless. So I think that's a natural part of it. And with the training some of the runs are hard. And getting up in the morning. I try to not have my runs take away from family time. I try to do my runs early in the morning before they are awake or after they have gone to bed. That's kind of hard because I'm getting up pretty early. I think it's worth the sacrifice but that is one of the hard parts for me just squeezing it in among everything else.

Chris I know you mentioned these lows are these how your body feels or more of emotions or a combination of everything

CR Umm I think it's mostly for me it's my body and then my mind goes there. ombination but it starts with my body and then moves to my mind... I'm sleepy or my legs are hurting and I still have 40 miles to there.....So most of the time it starts with physical and then my mind goes

there. Those physical, those downtimes are inevitable. But if your mind goes there...I try to get my mind to snap out of it. The deeper you go there the harder it is to get out.

Chris In addition to this what do you think about when you run long distances?

CR A lot of times umm my mind wanders and I think about family or things at work but most of the time it seems like I'm so focused on regulating everything that's going on.. Ok where am I at with calories where am I at with hydration or electrolytes .. How are my legs. .. Do I need to change my gate do I have any hot spots anywhere. These things are so consuming. I can run for hours without music without anyone around and I am not bored. Some people might say that is very boring. Really I am not bored too often.

Chris: What made you want to get involved with ultrarunning and also the marathon? Were they similar processes? What led to that decision.

CR My first marathon I read about, in St. George... Every year I would read about this marathon see pictures and thought o this is really cool. Such a big thing in our community and I wanted to be a part of it. So I did probably maybe 10 marathons and loved them and had fun with tem, but then I started running on trails, and the more I did it the more I liked it and I really liked being out in the wilderness...So it just seemed like if I wanted to do a trail race I had to do an ultramarathon. So it worked into Ok I really enjoy spending hours and hours out on the trail so a race sounds kind of fun because I get to spend hours and hours on the trail.

Chris What keeps your motivation high to keep going on

CR Umm I think I think there's a few things. One is distraction. So like iF there's another runner around you or whatever it helps to talk. Distract yourself and talk and get your mind off what's hurting. The other thing is in these races a lot of the times you are by yourself and you don't



have that luxury and so when I'm in those rough spots I always try to remind myself it's gonna get better and it will get better it's normal to go through those spots. and after doing a bunch of these now I've come to realize If you can just push through those rough spots it will get better. It seems like it won't and and it is the thing you want to do most. Finally I'm starting to see that if you can just get through those rough patches it will get better. A lot of times those rough patches are caused really by doing something really dumb like getting behind on your calories or getting behind on your fluids or electrolytes and sometimes If you don't have enough calories in you csometimes you are not thinking clearly. Sometimes it's just a matter of I need to eat something or I've got to get some water in me. A lot of times that's all it is.

Ok awesome Would you suggest or recommend those sport to your friends why or why not?

Cr I I would it's...it's....it's an indescribable thing . Here's the thing I feel silly telling you this because you know this better than anyone. I think I definitely recommend it because you see a different side of yourself when you've really pushed yourself beyond what you thought is possible. You' That reason alone when you get into this you are not the same at the end than when you got into this at the beginning. You start to believe anything is possible.

Anything additional? Or that's it

CR I think I've really taken from it is patience. When you're setting out to run 50 or 100 miles at first you're feeling good and you want to push and go fast but if you do this you'll push your legs and burn out. I learned to be patient to let everyone go by because they will... I've learned to be

really patient and conservative so I have that physical and mental energy and that translate to real-world things Trusting that if you keep moving forward it will be okay.

About 17 minutes

Chris Anything you hope to still learn from ultrarunning.

CR I think I think I still have a lot to learn so far as about taking care of my body and my feet. I still think I have gotten a lot better at pacing but I still have a lot of room for improvement. Like I like to run with friends and talk to them. Then I don't run my own race. But there's still a lot of learn The nutrition thing is still a learning process of learning what works and what doesn't and keeping your stomach from getting sick. I have a lot to learn as far as to be a good runner. Time wise and pacewise I am not a very good runner. I think I still have room to improve there.

Do other people influence your decision to run ultraraces? If so how?

I would say I am pretty independent in choosing the races I want to run a lot fo it is influenced by the scenery I want to do.. If it is too far I need to factor additional time and cost of hotels.

Good friend do a... social thing go out and have fun. They influence me in this way

Chris what are your future intentions regarding ultrarunning ? next few months or years?

CR yea I have a few things in mind. I have this needy thing going where I've done a 100mile race every month for the past 6 months so I want to do another 100miler on just my own. The big thing I have coming up is in September it is a hard a hard 100 miler . harder than anything I have ever done..my focus is on that. ..this goe...I did have a crazy thought..hte badwater is coming up. Well badwater got up to 110 but on the track 107 and so I thought I could do it.

Looking at questions.

Chris Barriers of finding time to do it earlier or later. Time coping with barriers

CR Yea time factor is probably the biggest thing for me. As you know with this kind of stuff you can't just rush into it. I am sure with your run it was more taxing early on but becomes more of a routine and your body gets used to it. To finish the race you'll have to have put in the time and training..I am fortunate I usually have Wednesdays off and so during the school year I can run the whole day and I can get a long run in 6 or 7 hours and not take away from family time and then during the rest of the week 4 or 5 miles during the week and weekends a little longer...and I don't feel I'm taking away from family time. That's an advantage of training ..

Chris are your other days longer?

Cr

Yea Yea my work is flexible I'm able to go in a little later or stay a little later or go home earlier they're ... They're pretty easy with that. I have friends who don't have that luxury. They have the same sort of thing they will go after their kids have gone to bed. IF you really want to do this sort of stuff You have to find the time to do it.

Chris I think that's awesome. Ok that covers all of my questions. Do you have any questions.

Cr No I do not. I think this is a cool study so definitely let me know what you find.

## Appendix H

Interviews all

Interview 1

Chris: I'll ask you to say your name

Bill:

Chris: How old are you

Bill: I am 45...47

Chris: How long have you been running for?

Bill: 7 years

Chris: Did you play sports prior to running?

Bill: Yea I played soccer like every child in Greece and I also did mountaineering.

Chris: And do you also work in addition to running

Bill: I work in a tv station

Chris: It's a broad question but what has been in your experience in running your overall experience.

Bill: It's not something you can answer in one word. Friends and self-confidence

Chris: What do you think about when you run long distances?

Bill: It's so many things...

Chris: Yea I know it is a difficult thing

Bill: You are thinking many things. You are think neutral. Eating energy pace but of course your mind is also going through your life.

Chris How many races did you do this year?

Bill: I did 4 this year. One too many this year.

Chris Is that typical from year to year?

Bill: For the fourth year I do 2 100 milers in the summer.

Chris How many years have you been involved in ultra races?

Bill: 6 years

Chris: Did you start out with shorter distances prior to that?

Bill: Road marathons

Chris What is your overall attitude towards ultrarunning?

Bill: I guess you can say I'm addicted.

Chris What is most important to you about ultrarunning?

Bill I guess it's the feeling. The feeling after you finish. IT's magical. The high, the runner's high.

Chris Any other words that come to mind about ultrarunning?

Bill This feeling being full umm complete.

Chris Okay good. Is there any negative things about ultrarunning or difficult things.

Bill Yes it can get tough. The beautiful nature but it was tough on my body. It can get really tough. I remembered a couple of good times the nature so yea it can get tough.

Chris What do you do to overcome the toughness of races

Bill You learn. You learn so you don't make the same mistakes again. That's the good thing even the tough races can be an experience.

Chris What motivates you to train? I know it can be tough even preparing for something like this.

Bill I love running anyways. Its like narcotics. However, to train for something like this .....you get obsessed for one race and that's what you are always thinking about. Some of the days are tough to get out there. Not every training is enjoyable.

Chris Some runners say running helps them to reach their limits do you agree with this?

Bill Yes ultrarunning definitely. You realize you have so much power, more than you think.

Chris Some runners say that ultrarunning is connected to their life philosophy or meaning of life. do you feel ultrarunning is connected to your life philosophy or meaning of life?

Bill Yes I think it is. If it wasn't connected with you I do not think you would do it.

Chris Ok absolutely. Some people say that people run ultraraces to earn glory or to be recognizable ? Or for you personally is it the enjoyment?

Bill Yea I think in our little society I'm quite known. I started just to yea to do it. Yea to see..to get to know my limits. Ok that was all. But of course you meet people it changes it gets bigger.

Chris Do you feel pressure from either yourself or others to run ultraraces?

Bill I wouldn't call it pressure. But sometimes when see a friend going to a race you may decide to also even if it wasn't in your first thinking. But that's not pressure.

Chris Yea so it's more of a positive thing.

Bill How do you judge yourself. That's the only way objective way of judging it. Criteria how your performance is and not judge just a performance. A performance is good or bad compared to others.

Chris And do you feel ultrarunning to develop your self-worth or value?

...

Chris Like how you feel about yourself is that influenced by ultrarunning?

Bill Well not personally.

Chris Do you feel you have to run ultrarunning for your physique or health.

Bill Well ultrarunning is not the best thing. It may be for physique but not for health. Maybe some of the training is good for your health but we are severely overdoing it in races.

Chris And for...have you had any serious injuries from ultrarunning?

Bill No nothing serious, only minor. Maybe I was lucky.

Chris O ok. Did you have to take off long periods of rest from these injuries?

Bill No.

Chris Have you...I know you talked a lot about exploring your limits and stuff , but have you learned anything additional in ultrarunning else or connected to life in general.

Bill Nothing I can name now. Yea searching for the meaning of life....uhh.. Examples of what you do. So definitely ultrarunning is quite a big thing for my life. Yes so I find examples of life or the meaning of life in general.

Chris What are your future goals for ultrarunning?

Bill Just to explore more races and places. I would like to come to America to run an ultrarace. I will do\_\_\_ in

Chris What would you want others to understand about ultrarunning?

Bill I would want them to know that you do not have to understand it. Just leave me alone and let me run (laughs)

Chris Ok. Yea definitely.

Bill I have quite good support.

Chris Ok maybe crazy in a positive way.

Bill Yea definitely.

Chris Ok that covers all of the questions I had is there anything additional you would like to add or include.

Bill No nothing I can think of. Both this and the questionnaire are quite good.

Chris Yea a good snapshot. Thank you very much.

## Interview 2

Chris And what is your full name.

Lucas Christo. (Tony



Chris And how old are you?

Tony 44

Chris And how long have you been running for.

Tony 5 years.

Chris Did you play sports prior to ultrarunning?

Tony Not much basketball soccer.

Chris And what have you experienced in ultrarunning? I know it's a broad question.

Tony It's mainly finding yourself out on the trails

Chris And how often do you run ultraraces

Tony 1 or 2 per year Marathon half marathon.

Chris And what do you think about when you run long distances?

Tony My family

Chris What are your attitudes towards ultrarunning? I know it is probably pretty positive but

What do you think about ultrarunning as a whole?

Tony Something that is not new but relatively new in Greece It is booming it is expanding it is beautiful it is exciting. It's very good to be a part of it.

Chris What made you decide to enter into ultrarunning

Tony My friends. Yes I have friends...a couple of friends who are running today.

Chris How did that happen? Was it just seeing them run?

Tony Well during Practices I was training at the stadium for marathons and they were training for ultras and we started talking and they got me through?

Chris What are other reasons for you for running? I know you mentioned friends and finding yourself is one more important than the other?

Tony The more important You do this for yourself. You do it to find yourself on the trail to find a part of yourself that you cannot find at work or part of your social life. Because it's all up there. So all this time by yourself it's kind of meditation

Chris What motivates you to train? I know it's tough at times to train

Tony I train 5 or 6 times a week. Usually in the morning before sunrise. What keeps me training is probably this the races.

Chris Is running connected to your life philosophy or meaning of life? What have you learned from running?

Tony I learned patience and to notice small little things that are important?

Chris And do you feel pressure from others or yourself to ultrarun?

Tony No

Chris And do you..And in races to you race to compare yourself to others or beat others?

Tony Ok in races you race against yourself .....If there is someone there if it is necessary help them .but not a race against others.

Chris Do you feel guilty if you unable to run?

Tony Laughs yes yesterday was the last time.

Chris Do you ultrarun to help your physique or health

Tony You do not do this for your physique. if you run for your health you can do 3 or 4 ks practices a day and you will be perfect. Most of the times to get here through practices you destroy yourself

Chris Do you hope to continue to learn things from ultrarunning

Tony Yes every race has to...every race teaches you something. Every race. From the smallest to this one 100 miler.

Chris What emotions does ultrarunning give you?

Tony Emotions?

Chris Emotions...yea like joy or passion

Tony During the race?

Chris Both. Yea

Tony You are going through many stages happiness depression..uhh sleeping etc. So you are going through all stages of emotions. A Lots of ups downs.

Chris What keeps you going through some of these tough parts of races these down times

Tony The organizers who are waiting to welcome you and hug you, your family that you don't want to quit and yourself your pride.

Chris Do you feel ultrarunning takes away from anything?

Tony 3 or 4 times a year you go to races and spend away from your family. But you are becoming a better person for yourself and your family so it is a tradeoff.

Have you had any major injuries from running?

Tony No I have not

Chris What would you want others to understand about ultrarunning?

Tony That ultrarunning has nothing to do with running it has to do with expressing yourself with something that is big. Larger than you.

Chris That covers everything I had, is there anything additional you would like to add?

Tony No I am ok.

Interview 3

Chris Dimitris What is your full name

Dimitris Despinathis

Chris And how old are you?

Sakis I am 36

Chris And how long have you been running for?

Sakis About 8 years.

Chris And did you play others sports prior to ultrarunning?

Sakis Yes I played soccer.

What experiences have you had from ultrarunning

Sakis Yes although I have participated in many long races and many long hours I have not experienced hallucinations. Sometimes I felt bad but mostly I feel good. Yea

Chris And how many years have you been involved with ultraraces

Sakis 6 years

Chris How often do you do them

Sakis I do 2 to 3 races per year

Chris And did you do other distances prior to this like 10ks

Sakis Yes I did marathons but only mountain races

Chris What is the most positive thing about ultraraces for you?

Sakis You get to know yourself better and you get to feel stronger

Chris Is there anything negative about ultrarunning

Sakis I've read that after many years in physiology some negative things but during one year I do not make many races so I don't think that a lot of stress goes to my body

Chris Ok have you had any serious injuries?

Sakis No nothing

Chris What made you decide to enter into ultraraces

Sakis I am a mountain lover I go to many mountains around the world and I am also a mountaineer mountain ultrarunning is something I like doing in the mountains

Chris What motivates you to keep training cause there's definitely a lot of training necessary to finish a race

Sakis Yes the race itself

Chris How much do you train?

Sakis About 1 to 2 months a year I do not train. When races are closer I train more often. About 5..4 to 5 times per week.

Chris And do you feel that you miss out on anything by having to train for these races?

Sakis My wife also likes mountain sports so we share it...Something I love so I don't think I miss something.

Chris Some runners so that running helps them explore their limits

Sakis Image I don't look at this

Chris I mean limits

Sakis Ah limits yes I agree

Chris Some people say..some people say that they run ultraraces to gain glory..

Sakis No no no I don't care

Chris Do you feel pressure from others or yourself to run

Sakis No

Chris Do you feel internal pressure or guilty when you cannot train

Sakis No

Do you sometimes feel pressure to develop self worth

Sakis Self-worth>No I am happy with with myself

Chris Do you run at all to improve health

Sakis Yes

Chris Is that a meaningful goal or are others more important

Sakis Yes I prefer training

Chris Do you hope to learn anything from ultrarunning>

Sakis Yes self-management

Chris Can you describe this a little more

Sakis Yes when your whole being wants to stop you continue and then you feel good later.

Sakis Sorry I have to go...I have to massage.

Interview 4 George

Chris What is your full name

Dimitris.....

Chris How old are you?

George 31

Chris And how long have you been running for?

George Since 2009

Chris Did you play other sports prior to starting ultrarunning?

George I was a European champion in weightlifting.

Chris Oh cool

George No relation to running but running was a hobby for me.

Chris How often do you run ultraraces

George Last year I did 3 and this year I have done 2

Chris Have you done other races prior like marathons?

George On tarmac?

Chris Yea

George No only on mountains.

Chris And what do you think about when you run long distances?

George Laughs .everything. Yes it's something like you can't elp it..everything comes into your mind your family your house everything inspiration.

Chris What made you decide to get into ultrarunning

George I love hiking very much and love the mountains for me it is like a second home. For me Imade some friends for ultrarunning. I spoke with them about this and entered into it.

Chris What motivates you to train?

George What?

Chris Like what keeps you going for training?

George I believe for me as a former athlete of weightlifting I need to train every day it is like a habit to me. I must watch out not to overdo it. I mean I only train 5 days a week. I also have 2 children.

Chris Is ultrarunning connected to your life philosophy or meaning of life?

George Yes I believe now yes you have to be focused. You have to be focused you have to know what you want and separate things in your mind I believe this helps you to be a better person.

Chris What do you gain from participating in ultrarunning I know you said it makes you a better person is that the most important thing for you?

George For participating?

Chris Yea

George I feel more free I don't know it's like this feeling I feel more free. Like one moment I am thinking of everything and another moment my mind blank..nothing. I am not thinking of anything

Chris Do you feel pressure from others or yourself to participate?

George This year..last year I had to abandon because I had dehydration problems. This year I had to finish I had a promise to myself....for me it is better to be a jobby.

Chris Umm do you feel any pressure to beat others or compare yourself to others?

George It is nice when you pass another person. But in ultraraces at least in the races I have run when you pass him he is still your friend there is no bad feelings. I think you know what I mean there is no problem

Chris Do you do ultrarunning for health?

George Like I told you I was a weight lifter I weighted more I was like 8-0 kilops with ultrarunning I lost a lot of weight and I feel better about my health now having more weight is bad for my health

Chris Have you had any major injuries from ultrarunning

George No I believe not. I try to watch out and not over do it. So I am fine

Chris What are your future goals for ultrarunning?



George Next year I want to try to run in UTMB or Transylvania this is only if I can gather enough money as this is an expensive plane ticket

Chris What would you want others to understand about ultrarunning?

George This is a tough question..I can only say to others run and I believe you will find out you are running this is something special to every person.

Chris That covers everything I had....

George Ok thank you.

Chris Is there anything you would like to add?

Interview 5 Giannis

Chris What is your full name?

George Konstantinos

Chris And how old are you

George 43

Chris And how long have you run for?

George As a runner? Since 2008 both on road and ultratrail

Chris How often do you run ultraraces?

George Races?

Chris Ultras?

George ...ahh..3/4 I mean 100km or 100 miles. Mountain ultratrail. On road maybe 1. Yes prefer trails then.

Chris And what do you think about when you run long distances?

George Freedom...Feeling alive Trying to see my demons face to face

Chris And did you do other distances before ultratrail?

George Mostly I like marathon and above. But also for my happiness and if my body is okay I would run every weekend but this is not always possible.

Chris What made you want to run?

George I ran from childhood but only 2 times a week 40 minutes. ....Like 2008 I was ..I had more time to practice I like and so I took my step from marathon and now I can run 100 miles.

Chris Awesome. And what keeps you training? Like I know a lot of training is necessary for the race. What keeps you going to train most days?

George Mostly Training happiness and so I don't have as much trouble finding the motivation. But some days the forces if you are tired or bored but outside only one week for practice. You feel like you need to go out.

Chris And how if it is a tough day how do you force yourself to go train? Is there something you keep in mind or say to yourself when it's tough and you don't want to go?

George Some days if there's a problem to go and force myself but if from the morning I don't feel very well sometimes I won't go. Other days if I don't feel as tough I go out and train and am happy.

Chris And...Do you feel pressure from others or yourself to run ultratrail races?

George Sometimes but not too much. If I have trouble with times or drama or too much pressure on all this to feel this and then I'm losing the real point of ultrarunning.

Chris Do you feel any pressure to beat other runners or compare yourself to other racers?

George No tough training and tough running after 2 or 3 hours you are warmed up and not thinking about runners.

Chris Do you feel pressure to ultrarun to improve your physique or health.

George Not much for health but I want to explore my limits. Sometimes I feel that the limits are much further than what we believe.

Chris Do you feel you miss out anything or lose anything from ultrarunning?

George No I don't I am doing this because I enjoy it. Sometimes my friends or family don't understand but that is okay.

Chris What are your future goals for ultraunning? Things you want to accomplish in the future?

George Goals?

Chris Yea like a new race or a new time?

George I think it is the same like now. Only that I want to try more races. Bigger. Go and race 5 days and pay more attention and more coping in the mountains?> Have you heard of? Olympia Ultra?

Yes Ok is that the Northface one?

George Norhface is the one on Mount Blanc Altvia Vienna.

Chris Ok cool. And what would you want others to know about ultrarunning?

George What others know?

Chris What you would like to tell them?

George Ultrarunning is really special. To train to run it's special. I would tell everyone to go out to run. Run 30 minutes 40 minutes it brings better balance to your mindto your life. IT makes you feel more free.

Chris That covers everything I had. Is there anything else you would like to say?

George I believe that running especially trail running is something that gave balance to my life so anything is possible.

Interview 6

Antonis

Chris What is your full name?

Antoni

Chris And how long have you been running for?

Antonis You can say the last 10 years but last 2 years for ultras.

Chris Did you play other sports prior to ultrarunning?

Antonis No I start with running but also bicycle on the mountain

Chris What do you think about when you run long distances? I know it's a tough question to start.

Antonis Lots of times it's a lot of stuff and other times it's nothing. Sometimes it's at ease and I'm relaxed.

Chris What are a couple of the things that go through your mind?

Antonis Sometimes it is about the problems in my life. But mainly it is the nice moments in my life. It is general it is nothing really constant. I don't have many examples of it.

Chris What was your motivation to begin ultrarunning?

Antonis The mountain. I only run mountain races. I am also a mountaineer and I come from the mountaineering so I am closer to the mountaineering or alpinist culture.

Chris What do you like about the mountain? Or what is your favorite thing?

Antonis I really like the loneliness the nature. The fact that you are away from one type of culture. I may say you are away from the people. Everything the mountain the people. Everything is more friendly actual substance. Everything is real. Everything you find in the mountain is what you see

Chris What motivates you to be out here?

Antonis Nature even all of my training's are in the mountain. All are away from the city

Chris How many times a week do you train?

Antonis Most of the time 3 or 4 times a week.

Chris Is ultrarunning connected to your life philosophy or meaning of life?

Antonis Probably yes I think. The fact that everything here is clear. The mountain the route. If you can do it you do it and if you can't you just have to give up.

Chris Some runners say running helps them to explore their limits, would you agree with this?

Antonis Maybe it's not my thing to try to find my limits in that sense. My physical limits. It's mostly mental limits. Cause Sometimes when I quit a race I realize probably it's more on my mind and mental state than on my mind.

Chris And what do you gain from participating in ultraraces?

Antonis These people. Cause most of us have the same way to see the way life and things .You find climbers who come here and we know each other from climbing and we have the same philosophy and being in nature. It's a step in the right way to spend time with them here in nature.

Chris-Do you see them outside of the races?

Antonis Most of them are from different places but with some of them we meet in other mountains. Or we meet in the city and go out to the mountain. Or arrange something things like that. Get away and meet me there.

Chris Would you consider the ultrarunning community some of your closest friends?

Antonis Probably I can't say that. If in my way of seeing things. When we met we are friends forever but when we are away we don't try to find each other every day to say hi but when we are together we feel very close.

Chris Do you feel pressure from others or yourself to ultrarun?

Antonis No I am here because I enjoy being here. I don't have a goal to make a certain time or finish in a certain place.

Chris Are there other reasons like to improve your health or your physique?

Antonis I don't think it can improve your health.

Chris And do you have any barriers or things that stop you from running ultradistances?

Antonis Barriers like?

Chris Like if you can't run. Like are there things that stop you from being able to run?

Antonis Time and probably that. If I have time I will arrange it so I can run. I will decide to do trains. I will decide my schedule and manage it.

Chris Is that something you decide straight or does it kind of change.

Antonis I have a general base plan so I have a general target so I know where I am going but if things change I have some problem it or I am to bored then I can change that I am not so strict.

Chris Do you have any future goals for ultrarunning?

Antonis The next race. I certainly run two races per year. I run this one and the other r is the mythical trail done by these guys and the others.

Chris What would you want others to know or understand about ultrarunning?

Antonis It is not as difficult as it sounds. What we are doing is quite easy. It is not as difficult as it sounds.

Chris What was your first race experience like?

Antonis Very intense. My first race was a race on Olympus and I never have run any smaller distance so I started with 30 kilometers and I have never run so much but I came from mountaineering so we would walk 8 hours 10 hours so it was not difficult but when we go to race we had to run. When we go to race we need to run so I ran like hell.

Chris What went through your mind to decide to do this race?

Antonis To be in the mountain. It was a great opportunity to leave my city and go be in the mountain. It was organized by my local club so it was easy. It was easy to go and run and be in the mountain. That's all I think

Chris Have you learned anything about yourself or the world through ultrarunning?

Antonis Probably yes. The mind is the number one obstacle when you want to achieve something because when we start to have doubts and these doubts multiply and become like an avalanche you start to block yourself without any reason.

Chris What are some of these doubts?

Antonis Can I manage this can I finish on time can i...would I make any major damage on myself. Probably that. I do not want to give everything to a race and after that I am exhausted. I want to run my race and be able to run a week later and start my training as normally as possible

Chris How do you overcome your doubts?

Antonis I do not know for sure. Either you are in the place that you can say I am sure because I made every step that I thought necessary to overcome any problem so you organize yourself you

organize your training you can then say everything is in place so probably I can do it whatever I think whatever doubts I have. Yes this time I have my doubts but everything is in place so probably I can go on but the doubts most of the time after a certain point are so strong that you are not logical anymore so you think of only the doubts and only the bad things and then it starts to get difficult so you want some of the people at the station to help get you out of this state of mind and push you a little more so lift you up and make you start again to have hope and go on again as normal.

Chris What are some of the things that help you to keep going or what is the best for you?

Antonis If there is a fellow runner there whether he is a runner or support and he is saying I know you can do it I know what is ahead of you trust them because you know they have experience you know you can rely on them so you take their proposition if it was from an aid station crew that hasn't run or doesn't run ...if you see christos and he says go on fiya? Then I feel you can do it....At this race there are not so many it is not so steep. This race was more flat about that. I didn't have a time that I felt I was too exhausted or power up to strong. I was in a steady state.

Chris Was that because of the race or yourself?

Antonis Well this is the 5/4th time.. I have run all the routs and this was the ones before it became a 100 miler I remember all the tree and the difficult parts so I am prepared....go on a little slower. To get there not so tired and then you have the ability to manage it without exhausting yourself up there. I prepared easier so this helps me to keep everything under control.

Chris If you had to describe the emotions ultrarunning brings to you?



Antonis Calm euphoria... In a state of calm and euphoria. There are times I feel I am tired my legs are sore but this is a different type of pain and I can deal with that. There is the good feeling I am here I am running everything is nice and beautify the night the forest the sunset.

Chris Do you feel others motivate or push you to ultrarun?

Antonis No no totally just from me I don't feel pressure from anyone. I run for me only for me and my experience and all the things that happen for me.

Chris That covers everything I had but is there anything else you would like to add

Antonis Is there anything else you would like me to clarify

Chris Um oh is there anything negative about ultrarunning I know you mentioned?....

Antonis When in the city you find the smokers their problems their bad stuff is completely more harmful than anything that will happen here. The worst thing that can happen is falling and hurting yourself but you can fall anywhere.

Chris Was there a race or training that changed the way you view ultrarunning?

Antonis No it's stayed the same maybe some small ups and downs but nothing profound small ups and downs.

Chris Anything that comes to mind? Maybe not but even a small thing?

Antonis When I discover myself through the race I start to understand the things we said before...mind starts to have doubts and may not be real and rejected. the fear feeds them and becomes unbearable. Thats something you have to keep in mind after the race in life. That many times Fears and doubts are not justified so you need to keep in mind all the time.

Chris Fears is that about finishing or something else?

Antonis Mostly about my physical state. I have the ability to finish that's my main goal. Having the ability to finish with a good state for my body don't just mess my body for the finish. I don't care. I come from mountaineering I want to finish and I want to finish with like a ...with a reserve of power just in case. I have the ability to finish in a good state to have a reserve of power just in case. Just in case To have a reserve to do something else to help somebody or to do something after the race . I have that in mind.

Interview 7

Chris What is your full name?

Chris How old are you

Spyros 52.

Chris And how long have you been running for?

Spyros About 25 years

Chris And did you play sports prior to ultrarunning

Spyros Yes football

Chris And what did you do other distances prior to ultraraces?

Spyros Yes I started with marathons..mountain marathons because I was a climber.

Chris How often do you run mountain ultraraces

Spyros Every month. One every month

Chris What do you think about when you run long distances?

Spyros For me it is an experience an adventure... Testing myself.

Chris What made you decide to enter into the mountain marathons.

Spyros First it is my love for the nature and for walking in the mountains

Chris What is your favorite thing about being in nature and the mountains

Spyros Just walking. I'm walking in the area

Chris Do you feel pressure from yourself or others to run ultraraces?

Spyros No no

Chris Do you feel guilty if you are unable to run or can't run?

Spyros No no Absolutely not.

Chris Do you feel you have learned anything from running.

Spyros Yes of course. All the experience. Discussions..uhh,...the volunteers too many things.

Chris What would be an example of something you learned?

Spyros Never to say never.Never.. Not to say this is your limit... We do not know our limits

Chris Do you feel that you miss out on anything by ultrarunning?

Spyros No everything is an experience so I do not feel that I am missing something.

Chris Is ultrarunning connected to your meaning of life or life philosophy?

Spyros Of course.

Chris How so?

Spyros Of course we are a part of nature we have to walk and clean the nature in order to respect in order to live with other people.In order to have respect to ourselves. It is a way of living.

Chris Are there any barriers or things that stop you from running ultradistances?

Spyros No. No. If I want to run I will do it and if not I won't. With friends mostly.

Chris What would you want others to understand about running ultrarunning?

Spyros Just try. Just try and find if it is better for them and they have to learn something. Just try

Chris Do you feel most people in your life support ultrarunning?

Spyros In my life or generally?

Chris Generally.

Spyros I know only 4 percent in Greece make some kind of sport so there are just a few and I think it's uhh...very important for us, I mean for the people who are involved with running to make this message of running and some kind of exercise known to all the people.

Chris Ok absolutely. That covers all the questions I had is there anything additional you would like to add or include.

Spyros I think that running is life. You cannot only exercise your body but also your mind. As many people who can be involved with running not only sports generally but running on the mountains. This is the way to have a better society.

Chris Ok. And for a better society, just like more connected?

Spyros Yes of course .better relations, less wars, better people.

Interview 8 Vaggellis

Chris Vassilis What is your full name/

Vassilis Bultas

Chris How old are you?

Vaggellis I am 48.

Chris And how long have you been running for?

Vaggellis Well for ultra running the past 4 years. And since I turned 40 I started running something longer than 400 meters. In university I was only running 100 200 meters.

Chris Ok cool. It's just a broad question but what have you experienced in terms of ultrarunning?

Vaggellis I like the feeling that you get not only from running. It starts in the preparation stage while you are running and after you finish, the whole package. And in mountains I don't think I would like to that close to a city, in a stadium, or city to city. But I can focus in the mountains.

Chris What is your favorite thing about the mountains?

Vaggellis I like the sense of isolation. I feel safe running. I feel very safe. The worse the weather is the better I feel.

Chris Are there specific situations that have changed your experience of ultrarunning>?

Vaggellis What specific situations?

Chris It's just a broad question to follow the structure like ways you have changed your view of ultrarunning.

Vaggellis I don't understand the question.

Chris Yea Like have there been situations or things that change the way you view ultrarunning has that changed from the beginning to do now.

Vaggellis No I just like it more and more. As I read more and participate in races In the beginning you know I just wanted to see if I could run some sort of distance. But now I like it more and more. No matter if it is something good or bad happens I enjoy the whole process.

Chris How often do you run ultraraces?

Vaggellis I do not have the opportunity you know being in Greece we only have three. There is one first week of July with the same person who created this race, there is one in Olympus mountain and there is one other. This one here and there is another one next week but I won't do because it is too close. Usually those two be specific and only those two.

Chris And where do you work?

Vaggellis Nestle Corporation.

Chris What are your attitudes towards ultrarunning?

Vaggellis You know I like this. it's not that it's a short distance you know 5k or 10 k where you go in and finish but you have time to think about yourself about everything. You get better each race you learn stuff. I mean in 5 kilometers if you just fall down no one will stop but in this race people will carry you. You know people come close to such events. You don't get to see it in other races.

Chris What do you think about when you run or are out on the trail?

Vaggellis You know everything There is nothing specific everything. Especially at night. During the day I enjoy the whole thing, but at night when I can't see nothing I think about my home work, everything. Everything seems much simpler. During the day you see the mountain but at night it's different.

Chris What did you think about during this races?

Vaggellis I was very unlucky this race. From 15 kilometers I sprained my ankle. I wanted to finish. It took 37 hours and all this time I was just thinking you know about gathering the strength to finish. My mind was there to just monitor the pain and focus and just wanted to make it back.

Chris Was there like a specific statement you said to yourself, or something you kept in mind to keep you going?

Vaggellis My son to bring him you know the medal they give you I promised to give it , to bring it home to him. so this was what was on my mind.

Chris Yea to see him with it cool. What made you decide to enter into ultrarunning?

Vaggellis Well I don't really know but I really liked the first race. It was only 100 kilometers and as a child I didn't have an opportunity to run in the woods in Athens. But the first time I ran this I knew I should have done this long ago, but I didn't have an opportunity to before.

Chris Ok cool. Do you feel any pressure from others or yourself to run out in the mountains.

Vaggellis No.

Chris No. Ok. And do you sometimes feel pressure to either beat others or compare yourself to others?

Vaggellis No, no. Sometimes when it's shorter distances throughout the year that we races for maybe 19 21 kilometers then yes but in these races no.

Chris Do you sometimes feel guilty if you are unable to run ultraraces or train?

Vaggellis Yea sometimes.

Chris Yes been there too. And is ultrarunning connected to your like life philosophy or meaning to life?

Vaggellis You know it gives me strength because working in a multinational business it's uhh..the environment has changed especially after the crisis in Greece. You are stressed all the time you have to perform better and better, but ultrarunning helps me to keep balance. It helps me to improve actually. I wouldn't be able to do my work in the office if I wasn't doing that on the other side.

Chris SO it helps you to eliminate stress?

Vaggellis Yea it makes you realize that things are not eventually so important as they seem .

Eighty percent of the problems eventually solve themselves.

Chris Yes it will work out just let the time happen.

Vaggellis You know go with the flow.

Chris Do you have any barriers to running ultradistances? Either mental, time, or other things?

Vaggellis No it's not.... You know just working I have 30 days of vacation from work so I have to do everything in those 30 days you know. This is the only barrier. I would like to go to the States to run there but you know I have to take you know 15 before doing something that. If I was alone I would do it but I have my family. I have to use vacation you know summer vacation Christmas vacation visit my parents. So this is the only barrier.

Chris Ok definitely tough to balance it. I know you mentioned the injury from this race but have you had any serious injuries in the past?

Vaggellis No. You know sprained ankles things like that. Nothing serious.

Chris Ok and what are your future goals for ultrarunning?

Vaggellis Keep running.

Chris Ok. Definitely that's a big one. What would you want others to understand about ultrarunning?

Vaggellis That you have to...you know...you have to feel good about yourself to be able, be patient, be persistent, to get into ultrarunning. It's not like the other stuff It's not an event that is like a triathlon. That you know all the people are there waiting for you You know in the marathon they are there waiting for you. Start alone finish alone. Sometimes they have to wait for you besides the people that are organizing the race.

Chris Definitely it's a much smaller field.

Vaggellis It's nice. But if you want the other stuff then this isn't worth it to run the 100 miles just finish have a cup of coffee and go to sleep.



Chris And do you feel, like others have described feeling like it's a really close community, do you feel that?

Vaggellis Yea this part yea it is. You know it starts..I mean most of the people if you asked them now they wouldn't tell you...they tell you that they wouldn't come back next year. But you know a week from now the telephones will start again you know just to push each other to be here next October.

Chris Yes definitely kind of motivate each other to come next year. Ok, that covers all the questions I had is there anything you would like to add or include?

Vaggellis No..You are from United States and I think this is where it started. I would love to go to America to run in you know Leadville...

Chris Definitely like Badwater.

Vaggellis Yea I would like to go run there but time constraints and I think the American schools are the best